## Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

### Sacramento River Basin

RD0150 Reclamation District No. 0150 Merrit	Overall LMA Rating	Total LMA Miles	A   * Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.					
Island	M *	17.74	Rating is M i	instead of A.	_			
Rated Item		Maintena	nce Deficiency		Enford	cement		k System scence
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee							I	
Vegetation	0.06	0.02	0.14	0.79%	0.42	1.11		
Trim / Thin Trees	0.02	0.04	0.18	1.01%				
Encroachments	0.36		0.36	2.03%	0.49	0.08		
Animal Control	0.02	0.01	0.06	0.34%				
Slope Stability	0.08		0.08	0.45%			0.01	
Erosion / Bank Caving	0.08	0.01	0.12	0.68%			0.03	
Crown Surface / Depressions / Rutting	0.01		0.01	0.06%				
Supplemental		0.07	2.22	4.500/		I	I	
2017 USACE Erosion Survey, DRAFT		0.07	0.28	1.58%				
DWR UCIP Field Study					0.28	0.03		
LMA Totals:	0.63	0.15	1.23	6.93% *	1.19	1.22	0.04	0.00
Unit No. 01 Sutter Slough LB	Overall Unit Rating	Total Unit Miles						
RD0150	Α	0.52						
		Maintena	nce Deficiency		Enforcement Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	
Earthen Levee								
Animal Control	0.01		0.01	1.93%				
Unit Totals:	0.01	0.00	0.01	1.93%	0.00	0.00	0.00	0.00
Unit No. 02 Sacramento River RB	Overall Unit Rating	Total Unit Miles	U Rated Mile	Threshold Percer es are present, so				
RD0150	M *	7.81	instead of A.					
5 . 16		Maintena	nce Deficiency		Enforc	cement	Design 8 Obsole	& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.03		0.03	0.38%	0.33	0.76		
Trim / Thin Trees	0.02		0.02	0.26%				
Encroachments	0.25		0.25	3.20%	0.07	0.06		
Animal Control	0.01		0.01	0.13%				
Slope Stability	0.05		0.05	0.64%				
Erosion / Bank Caving	0.02		0.02	0.26%				
Supplemental	I		I					
2017 USACE Erosion Survey, DRAFT		0.07	0.28	3.58%				
DWR UCIP Field Study					0.17	0.01		
Unit Totals:	0.38	0.07	0.66	8.45% *	0.57	0.83	0.00	0.00

## Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

## Sacramento River Basin (cont.)

Unit No. 03 Elk Slough LB	Overall Unit Rating	Total Unit Miles	U Rated Miles are present, so the Overall Unit Rating is M						
RD0150	M *	9.41	instead of A.						
Rated Item		Maintena	nce Deficiency		Enforc	Enforcement		Design & System Obsolescence	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Vegetation	0.03	0.02	0.11	1.17%	0.09	0.35			
Trim / Thin Trees		0.04	0.16	1.70%					
Encroachments	0.11		0.11	1.17%	0.42	0.02			
Animal Control		0.01	0.04	0.42%					
Slope Stability	0.03		0.03	0.32%			0.01		
Erosion / Bank Caving	0.06	0.01	0.10	1.06%			0.03		
Crown Surface / Depressions / Rutting	0.01		0.01	0.11%					
Supplemental							<u>'</u>		
DWR UCIP Field Study					0.11	0.02			
Unit Totals:	0.24	0.08	0.56	5.95% *	0.62	0.39	0.04	0.00	

## **LMA District Cover Sheet**

Fall 2018 Levee Inspection Results

## **Reclamation District No. 0150 Merrit Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			M *	
	** Non-receipt of Summ Reports may effect or		* Overall LMA Threshold 10.00%; however, U R so the Overall LMA Ra	ated Miles are present,
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated		nined for the spring ins ria in the spring and in		ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			on and maintenance de nded to be an indiction o	
Comments				

### **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles
Unit No. 01 Sutter Slough	Left	0.52

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/26/2018 - 4/26/2018		11/9/2018 - 11/9/2018	
DWR Inspector	Dave Torres		Luz Dial	
Accompanied By	David Julian DWR		Michael Moncrief MBK	

### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Slough	Left	0.52	11/09/2018 11/09/2018	Luz Dial

LM Start	0.00	Rating **	Α	Issue No.		4		
LM End	0.00	Issue Type +	Ma	Location * N/A				
Category	Earthen L	evee		GPS La	atituc	le/Longitude		
Calegory				Start		End		
Item		s & Maintena	nce		0		0	
пеш	Manuals				0		0	
DWR ID	DWR_RD0	150_01_s _ 201	3_4					
		Comn	nent Cod	de				
			_					
		Inspecto	or Comm	nent				
This LMA has the updated O&M manuals for their district.								

No Photos

LM Start	0.00	Rating **	Α	Issue No.		5	
LM End	0.00	Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		cy Supplies &			0		c
пеш	Equipmer	nt			0		c
DWR ID	DWR_RD0	150_01_s _ 201	3_5				
		Comn	nent Coc	lo.			

No Photos

Inspector Comment

This LMA has adequate amount of flood fighting materials in a centralized location.

LM Start	0.00	Rating **	Α	Issue No.		6	
LM End	0.00	Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш					٥		0
DWR ID	DWR_RD0	150_01_s _ 201	3_6				
		Comn	nent Cod	le			
	Inspector Comment						
The crew of	The crew of this LMA had flood fighting training from DWR.						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	U · Unaccentable	A/W · Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Slough	Left	0.52	11/09/2018 11/09/2018	Luz Dial

LM Start	0.00	Rating **	Α	Issue No.		1			
LM End	0.48	Issue Type +	Ма	Location *		LS			
Category	Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Vegetatio	n		38.3326	42 °	38.328362°			
item	-121.583471 ° -121.576783								
DWR ID DWR_RD0150_01_f _ 2018_1									
DVVICID	DWR ID DWR_RD0150_01_f _ 2018_1								

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

### Inspector Comment

Annual vegetation is maintained.



View of landside vegetation. Fall 2018

LM Start	0.00	Rating **	Α	Issue No.		2	
LM End	0.48	Issue Type +	Ма	Location *	Location * WS		
Category	Catagory Earthen Levee			GPS Latitude/Longitude			
Calegory	egory			Start		End	
Itom	Vegetatio	n		38.3326	42°	38.328362	0
Item		-121.5834	71 °	-121.576783	0		
DWR ID DWR_RD0150_01_f _ 2018_2							

### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

### Inspector Comment

Annual vegetation is maintained.



View of waterside vegetation. Fall 2018

LM Start	0.49	Rating **	М	Issue No.		3	
LM End	0.49	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		38.3282	42°	38.328242	0
пеш		J.49 Issue Type + Ma Location * then Levee GPS La	73°	-121.576573	0		
DWR ID	DWR RD0	150 01 f 201	8 3				Т

### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Backfill rodent holes.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles
Unit No. 02 Sacramento River	Right	7.81

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	4/17/2018 - 4/18/2018		11/9/2018 - 11/9/2018	
DWR Inspector	Dave Torres		Luz Dial	
Accompanied By				

<sup>\*</sup> Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

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- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

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## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	A/W	Issue No.		46
LM End	0.14	Issue Type +	Ma	Location *		WS
Category			GPS Latitude/Longitude			
Category	Category			Start		End
Item	2017 Stor	m Damage		38.3293	69°	38.329767°
пеш				-121.574936 °		-121.574589°
DWR ID DWR_RD0150_02_f _ 2017_46						
	Comment Code					

### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 185 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:286

Site Designation:LMA-112 Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Scarps upto 3 ft deep, not fully vertical though. Area of concern because erosion is not very deep into prism.

LM Start	0.11	Rating **	A/W	Issue No.	46 (cont)
LM End	0.14	Issue Type +	Ма	Location *	WS



Photo 2 of 3: LEVAL\_FA\_2018\_286\_2138.jpg



CR : Crown

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally A Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	A/W	Issue No.		46 (cont)	
LM End	0.14	Issue Type +	Ма	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
Calegory	alegory		Start		End		
Item	2017 Stor	m Damage		38.3293	69°	38.329767°	
пеш				-121.5749	36°	-121.574589°	
DWR ID DWR_RD0150_02_f _ 2017_46							
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 185 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:286

Site Designation:LMA-112

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Scarps upto 3 ft deep, not fully vertical though. Area of concern because erosion is not very deep into prism.



LM Start	0.14	Rating **	U	Issue No.	ue No. 106		
LM End	0.16	Issue Type +	En	Location *		LS	
Category	Catagory Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
ltom	Vegetatio	/egetation		38.3297	82°	38.330058°	
Item				-121.5748	20°	-121.574574°	
DWR ID DWR_RD0150_02_s _ 2018_106						·	
			. ^				

## Comment Code

V6: Landscaping

### Inspector Comment

Landowner needs to maintain vegetation and remove unpermitted fruit trees on levee slope.



View of landscaping that needs to be maintained and of unpermitted citrus trees on levee slope. Fall 2018

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.14	Rating **	A/W	Issue No.		5
LM End	4.77	Issue Type +	Ob	Location *		WS
Category Earthen Levee			GPS La	atitud	e/Longitude	
Calegory			Start		End	
Vegetation				38.3297	'82 °	38.374641 °
пеш	Item					-121.524730 °
DWR ID DWR_RD0150_02_s _ 2012_5						
		Comn	nent Cod	de		
V8 : Enviro	onmental F	Requirements.				
		Inspecto	or Comm	nent		

Photo 1 of 1 : FA\_2018\_RD0150\_16\_5\_20180910\_00002.jpg

View of the re-vegetation sign. Spring 2016

LM Start	0.16	Rating **	U	Issue No.		49	
LM End	0.16	Issue Type +	En	Location *	* WS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Encroach	ments		38.33004	47 °	38.330047°	
пеш			-121.57453	38°	-121.574538°		
DWR ID DWR_RD0150_02_s _ 2012_49							
	Comment Code						

BU: Building

Inspector Comment



Building located on waterside of levee.

Photo 1 of 1: FA\_2018\_RD0150\_16\_990\_20180910\_00072.jpg

LM Start	0.17	Rating **	M	Issue No.	990			
LM End	0.21	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.33017	'3°	38.330576°		
item				-121.57449	0°	-121.574093 °		
DWR ID DWR_RD0150_02_s _ 2012_990								
Comment Code								

V6: Landscaping

Inspector Comment



Landscaping was found on the landside of the levee looking upstream.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected C: Corrected C: Corrected AW: Acceptable but Monitor & Maintain C: En: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.18	Rating **	U	Issue No.		105	
LM End	0.20	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroachments			38.330339°		38.330500°	
пеш				-121.5743	11 °	-121.574138 °	
DWR ID	DWR_RD0	150_02_s _ 201	8_105				
Comment Code							
FE : Fence							

Inspector Comment

Landowner has installed a fence blocking access to levee.



Iron fence was not included under Permit 17359-A; only retaining wall, terraced slope, and steps were approved on landside. Spring 2018

LM Start	0.23	Rating **	М	Issue No.	ssue No. <b>991</b>		
LM End	0.23	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
					End		
Item	DWR UCI	P Field Study		38.3308	88 °	38.330888 °	
пеш				-121.5737	69°	-121.573769°	
DWR ID 22416							
	Comment Code						

### Inspector Comment

FS ID:42700 DS\_ID:22416

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly.- Dense vegetation on waterside.- Seems abandoned pipe and pump.

FIELD STRUCT DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 2.8 feet below the crown. Pump on the landside (LS). Concrete box on the LS. (Thomas Estate). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.23)]. FS Date: 8/27/2013

### Photo 1 of 3: UCIP\_FA\_2018\_42700\_34247.jpg



WS view: No pipe found on waterside slope. Dense vegetation on waterside.

N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

### + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.23	Rating **	М	Issue No.		991 (cont)
LM End	0.23	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		38.33088	8 °	38.330888 °
пеш				-121.57376	9°	-121.573769 °
DWR ID	22416					

### Inspector Comment

Comment Code

FS\_ID:42700 DS\_ID:22416 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly.- Dense vegetation on waterside.- Seems abandoned pipe

and pump.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 2.8 feet below the crown. Pump on the landside (LS). Concrete box on the LS. (Thomas Estate). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.23)].

FS Date: 8/27/2013

LM Start	0.23	Rating **	М	Issue No.	991 (cont)
LM End	0.23	Issue Type +	En	Location *	



LS view: abandoned pipe and pump on landside toe.

Photo 3 of 3: UCIP\_FA\_2018\_42700\_34245.jpg



LS view: abandoned pipe and concrete box on landside toe.

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.25	Rating **	U	Issue No.		4
LM End	0.25	Issue Type +	En	Location *		LS
Catagoria Earthen Levee			GPS La	atitud	e/Longitude	
Category				Start		End
Vegetation				38.3310	35°	38.331035°
item			-121.573502°		-121.573502°	
DWR ID DWR_RD0150_02_s _ 2012_4						
		Comn	nent Cod	de		
V6 : Lands	caping					
		Inspecto	or Comm	nent		

Photo 1 of 1: FA\_2018\_RD0150\_16\_4\_20180910\_00001.jpg

Landscaping on landward slope of the levee.

LM Start	0.28	Rating **	М	Issue No.		104	
LM End	0.31	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Vegetation			38.331457°		38.331834°	
пеш				-121.5732	78°	-121.572933°	
DWR ID	DWR_RD0	150_02_s _ 201	8_104			·	
Comment Code							
V6 : Landscaping							

Inspector Comment

No Photos

LM Start	0.36	Rating **	М	Issue No.		103	
LM End	0.36	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	Thin Trees		38.332452°		38.332452	٥
пеш		_		-121.572378 °		-121.572378	٥
DWR ID	DWR_RD0	150_02_s _ 201	18_103				
		Comn	nent Coc	de			
T1 : Trim trees to at least five feet above ground level.							_
	Inspector Comment						

No Photos

\* Location

N/A: Not Applicable LS : Land Side WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.38	Rating **	М	Issue No.		6	
LM End	0.38	Issue Type +	Ma	Location *	WS		
Catagoni Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Slope Stability			38.332598°		° 38.332598°	
iteiii				-121.572179°		-121.572179°	
DWR ID DWR_RD0150_02_s _ 2012_6							
Comment Code							
S2 : Repair the levee slope damaged by foot traffic and prevent access							

where possible.

Inspector	Comment
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View of slope instability around stairway. Fall 2018

Photo 2 of 2: FA\_2018\_RD0150\_16\_6\_20180910\_00003.jpg



View of slope instability on the waterside of the levee. Fall 2016

LM Start	0.38	Rating **	М	Issue No.		13
LM End	0.38	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	ments		38.3326	647°	38.332647°
пеш			-121.572140°		-121.572140°	
DWR ID DWR_RD0150_02_s _ 2012_13						
Comment Code						
ST : Stairv	vay					
Inspector Comment						

## Photo 1 of 1: FA\_2018\_RD0150\_16\_13\_20180910\_00008.jpg



A stairway was found on the waterside of the levee. The picture was taken from the crown looking upstream. Spring 2011

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.39	Rating **	М	Issue No.		992
LM End	0.39	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory						End
Item	DWR UCIP Field Study			38.3326	70°	38.332670°
пеш				-121.572132 °		-121.572132°
DWR ID	22417					

### Inspector Comment

Comment Code

FS ID:20268 DS\_ID:22417 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Water leaks from pressure breaker.- Distribution box at the landward toe not found/visible.- Service pole on LS toe. FIELD\_STRUCT\_DESC: 4-inch steel irrigation discharge pipe joined to a 6-inch steel irrigation discharge pipe which is in turn joined to a 10inch steel irrigation discharge pipe through the levee, 5.8 feet below the crown. 1.5-inch electrical conduit through the levee, 3 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Retention of an irrigation pumping plant, centrifugal pump, and gate valve on the WS levee slope with a 10-inch pipe through the levee authorized under Permit No. 9448, 1974 - William N. Runyon). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/27/2013

LM Start	0.39	Rating **	М	Issue No.	992 (cont)
LM End	0.39	Issue Type +	En	Location *	



WS view: walkway/stairs, pump on levee slope.

Photo 2 of 3: UCIP\_FA\_2018\_20268\_34243.jpg



WS view: pump, electric control box, electric conduit on concrete pad. Water leaks from pressure breaker.

CR : Crown

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency

Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.39	Rating **	М	Issue No.	992 (cont)	
LM End	0.39	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Category	Category		Start		End	
ltom	DWR UCIP Field Study		38.332670°		38.332670°	
пеш	Item			-121.572132 °		-121.572132 °
DWR ID	22417					
Comment Code						

## Inspector Comment

FS\_ID:20268 DS\_ID:22417 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/27/2013

UCIP Comments: - Water leaks from pressure breaker.- Distribution box at the landward toe not found/visible.- Service pole on LS toe. FIELD\_STRUCT\_DESC: 4-inch steel irrigation discharge pipe joined to a 6-inch steel irrigation discharge pipe which is in turn joined to a 10-inch steel irrigation discharge pipe through the levee, 5.8 feet below the crown. 1.5-inch electrical conduit through the levee, 3 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Retention of an irrigation pumping plant, centrifugal pump, and gate valve on the WS levee slope with a 10-inch pipe through the levee authorized under Permit No. 9448, 1974 - William N. Runyon). [Additional Reference(s): DWR Levee Log, 2005].



LS view: distribution box not found/visible on levee toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

CR : Crown

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.46	Rating **	М	Issue No.		993
LM End	0.46	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titude	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.3335	27°	38.333527°
пеш				-121.5712	74°	-121.571274°
DWR ID	22418					·

### Inspector Comment

Comment Code

FS ID:20267 DS\_ID:22418 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Abandoned pipe and pump.- Needs proper

abandonment.

FIELD\_STRUCT\_DESC: 6-inch steel irrigation discharge pipe and a 1inch electrical conduit through the levee, invert elevation 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. Electrical box on the WS slope. (Retention of an irrigation pumping plant, centrifugal pump, and gate valve on the WS with a 6-inch pipe through the levee authorized under Permit No. 9447, 1974 - Reuben A. Gentner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.47)].

FS Date: 8/27/2013

LM Start	0.46	Rating **	М	Issue No.	993 (cont)
LM End	0.46	Issue Type +	En	Location *	



WS view: steel pipe and pump on levee slope. Dense vegetation on waterside.

Photo 2 of 3: UCIP\_FA\_2018\_20267\_34238.jpg



WS view: steel pipe and pump on concrete pad. Seems abandoned.

+ Issue Type

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.46	Rating **	М	Issue No.	,	993 (cont)
LM End	0.46	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	P Field Study		38.3335	27°	38.333527°
пеш				-121.5712	74°	-121.571274°
DWR ID	22418					

## Inspector Comment

Comment Code

FS ID:20267 DS\_ID:22418 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Abandoned pipe and pump.- Needs proper

abandonment.

FIELD STRUCT\_DESC: 6-inch steel irrigation discharge pipe and a 1inch electrical conduit through the levee, invert elevation 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. Electrical box on the WS slope. (Retention of an irrigation pumping plant, centrifugal pump, and gate valve on the WS with a 6-inch pipe through the levee authorized under Permit No. 9447, 1974 - Reuben A. Gentner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.47)].

FS Date: 8/27/2013



WS view: steel pipe, gate valve, and pump on levee slope. Seems abandoned.

LM Start	0.48	Rating **	М	Issue No.		994	
LM End	0.48	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP Field Study		38.3337	54°	38.333754°	
item			-121.5710	18°	-121.571018°		
DWR ID	22419						

## Comment Code

### Inspector Comment

FS\_ID:20284 DS ID:22419 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Needs proper abandonement.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, invert elevation 5.7 feet below the crown. Power line on the landside (LS). (Retention of an irrigation pumping plant, a centrifugal pump, and an 8-inch steel pipe through the levee with a gate valve at the waterside [WS] end authorized under Permit No. 9446, 1974 -Hanna Olsen). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.49)].

FS Date: 8/27/2013

### Photo 1 of 2: UCIP FA 2018 20284 34265.jpg



WS view: abandoned pump on levee slope. Dense vegetation on waterside.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.48	Rating **	М	Issue No.	994 (cont)	
LM End	0.48	Issue Type +	En	Location *		
Catagory	Suppleme	ental		GPS Lat	itud	e/Longitude
Category				Start		End
ltom	DWR UC	P Field Study		38.33375	4 °	38.333754 °
Item				-121.57101	в°	-121.571018 °
DWR ID	22419					·

### Comment Code

### Inspector Comment

FS\_ID:20284 DS\_ID:22419 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Needs proper abandonement.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, invert elevation 5.7 feet below the crown. Power line on the landside (LS). (Retention of an irrigation pumping plant, a centrifugal pump, and an 8-inch steel pipe through the levee with a gate valve at the waterside [WS] end authorized under Permit No. 9446, 1974 - Hanna Olsen). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 34.49)].

FS Date: 8/27/2013



LS view: exposed steel pipe and power pole on levee toe.

	LM Start	0.54	Rating ""	N N	issue ivo.	66		
	LM End	0.54	Issue Type +	Ma	Location *		LS	
	Category	Earthen L	evee	GPS Latitude/Longitude				
					Start		End	
	Item	Trim / Thin Trees			38.334387°		38.334387	0
					-121.5703	55 °	-121.570355	0
	DWR ID	DWR_RD0	150_02_f _ 201	6_66				
			Comn	nent Coo	le			
	TE . Troc o	. 4						

T5: Tree stumps.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.59	Rating **	М	Issue No.	45		
LM End	0.59	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	bility		38.3348	98°	38.334898	0
item		-121.5696	32°	-121.569632	0		
DWR ID	DWR_RD0150_02_f _ 2018_45						
Comment Code							

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment



View of slope damage likely from vehicle traffic. Fall 2018

LM Start	0.70	Rating **	М	Issue No.		995
LM End	0.70	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory	Category					End
Item	DWR UCI	P Field Study		38.33618	33°	38.336183°
пеш				-121.56838	33°	-121.568383°
DWR ID	22421					

## Comment Code

### Inspector Comment

FS\_ID:20303 DS\_ID:22421 EP\_NO: 16109

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 10" steel pipe on both sides of the levee. According to permit and inspectors note- 16" steel pipe through the levee.-concrete standpipe inside water filtration plant on landside toe.- air pressure tank on waterside steel deck.

FIELD\_STRUCT\_DESC: 16-inch wrapped steel irrigation discharge pipe and a 2-inch electrical conduit through the levee, invert elevation 6.2 feet below the crown. Slant pump on a steel platform on the waterside (WS) slope. 4-inch abandoned pipe on the WS slope. Concrete standpipe and power pole at the landside (LS) toe. (Plans to replace an existing irrigation pipe with a 16-inch wrapped steel pipe through the levee, construct a 3-foot-square concrete anchorage block on the WS slope, and install a 2-inch utility pipe through the levee authorized under Permit No. 18258-Revised, 2007 - Wilson Farms, Inc). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced. USACE Sacramento O&M Manual 112, March 1957, (RM 34.71), 14-inch pipe referenced.

FS Date: 8/27/2013

Photo 1 of 3: UCIP\_FA\_2018\_20303\_34287.jpg



WS view: slant pump on steel deck, 4-inch pipe (left) and 10-inch pipe (right) on levee slope.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.70	Rating **	М	Issue No.		995 (cont)
LM End	0.70	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.33618	3°	38.336183°
пеш				-121.56838	3°	-121.568383 °
DWR ID	22421					

## Inspector Comment

Comment Code

FS\_ID:20303 DS\_ID:22421 EP\_NO: 16109

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 10" steel pipe on both sides of the levee. According to permit and inspectors note- 16" steel pipe through the levee.-concrete standpipe inside water filtration plant on landside toe.- air pressure tank on waterside steel deck.

FIELD\_STRUCT\_DESC: 16-inch wrapped steel irrigation discharge pipe and a 2-inch electrical conduit through the levee, invert elevation 6.2 feet below the crown. Slant pump on a steel platform on the waterside (WS) slope. 4-inch abandoned pipe on the WS slope. Concrete standpipe and power pole at the landside (LS) toe. (Plans to replace an existing irrigation pipe with a 16-inch wrapped steel pipe through the levee, construct a 3-foot-square concrete anchorage block on the WS slope, and install a 2-inch utility pipe through the levee authorized under Permit No. 18258-Revised, 2007 - Wilson Farms, Inc). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced. USACE Sacramento O&M Manual 112, March 1957, (RM 34.71), 14-inch pipe referenced.]

FS Date: 8/27/2013

LM Start	0.70	Rating **	М	Issue No.	995 (cont)
LM End	0.70	Issue Type +	En	Location *	



WS view: steel pipes and leaky slant pump on steel deck.

### Photo 3 of 3: UCIP\_FA\_2018\_20303\_34285.jpg



LS view: 10-inch pipe and air vent on levee slope. Concrete standpipe inside water filtration plant.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency

N: Not Inspected/Rated Ma: Maintenance Deficiency

C: Corrected Ob: Design & System Obsolescence

CR: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.71	Rating **	С	Issue No.		10	
LM End	0.71	Issue Type +	Ma	Location *		WS	
Catagonia Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Category			Start		End	
Item	Encroachi	ments		38.3362	28°	38.336228	0
пеш			-121.5683	32°	-121.568332	0	
DWR ID	DWR_RD0	150_02_s _ 201	3_10				
		Comn	nent Coc	de			
DE : Debri	S						
Inspector Comment							

No Photos

LM Start	0.71	Rating **	М	Issue No.		59
LM End	0.71	Issue Type +	Ma	Location *		LS
Earthen Levee			GPS La	atitud	le/Longitude	
Calegory	Category					End
Item	Encroach	ments		38.3362	91 °	38.336291 °
пеш				-121.5682	60°	-121.568260°
DWR ID	DWR RD0	150 02 s 201	6 59			

### Comment Code

TR: Tree or limb

### Inspector Comment

Damaged tree roots and trunks appear to damage landside slope of the levee and need to be removed.

LM Start	0.71	Rating **	М	Issue No.	59 (cont)
LM End	0.71	Issue Type +	Ma	Location *	LS

### Photo 1 of 2: FA\_2018\_RD0150\_16\_59\_20180910\_00040.jpg



View of the tree trunk on the landside of the levee. Fall 2017

Photo 2 of 2: FA\_2018\_RD0150\_16\_59\_20180910\_00041.jpg



View of the tree limbs and roots on the landside of the levee looking downstream. Fall 2016

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable M : Minimally Acceptable Ob : Design & System Obsolescence

En : Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	0.79	Rating **	М	Issue No.		73	
LM End	0.79	Issue Type +	Ma	Location *	LS		
Catagony	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroachments			38.337307		38.337307°	
пеш			-121.567698°		-121.567698°		
DWR ID	DWR_RD0	150_02_f _ 201	7_73				
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							
Landowner needs to remove dead tree from easement.							



View of fallen tree on landside levee slope. Fall 2018

LM Start	0.96	Rating **	М	Issue No.		102	
LM End	0.99	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetation			38.338976°		38.339249°	
пеш				-121.5652	67°	-121.564937 °	
DWR ID	DWR_RD0	150_02_s _ 201	8_102				
Comment Code							
V6 : Lands	V6 : Landscaping						

Inspector Comment

No Photos

LM Start	0.97	Rating **	U	Issue No.		12	
LM End	0.97	Issue Type +	En	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Encroachments ltem				38.339035°		38.339035 °	
item	item			-121.565145 °		-121.565145 °	
DWR ID	DWR_RD0	150_02_s _ 201	2_12				
		Comn	nent Cod	de			
TR : Tree or limb							
		Inspecto	or Comm	nent			

Photo 1 of 1: FA\_2018\_RD0150\_16\_12\_20180910\_00007.jpg

Overgrown trees were obstructing the landside slope of the levee looking upstream.

\* Location + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence LS: Land Side N : Not Inspected/Rated N/A: Not Applicable A : Acceptable M : Minimally Acceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.14	Rating **	N	Issue No.		8	
LM End	1.14	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thin Trees			38.3408	864°	38.340864°	
пеш	item				15°	-121.562915°	
DWR ID DWR_RD0150_02_s _ 2012_8							
		Comn	nent Cod	de			
T5 : Tree s	stumps.						
		Inspecto	or Comm	nent			

Photo 1 of 1: FA\_2018\_RD0150\_16\_8\_20180910\_00005.jpg



View of a tree stump on the landward slope.

LM Start	1.26	Rating **	С	Issue No.		92		
LM End	1.26	Issue Type +	En	Location *		LS		
LIVI ETIU	1.20	133dC Type T	L11	Location		LO		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category	Calegory			Start		End		
Item	Vegetatio	n	38.3422	29°	38.342229°			
пеш				-121.561694°		-121.561694°		
DWR ID	DWR_RD0	150_02_s _ 201	2_92					
	Comment Code							
V6 : Lands	V6 : Landscaping							
Inspector Comment								

No Photos

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

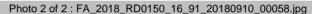
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.32	Rating **	U	Issue No.		91	
LM End	1.35	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.3430	10°	38.343276°	
пеш			-121.561096 °		-121.560739°		
DWR ID DWR_RD0150_02_s _ 2012_91							
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			
LMA needs to collect prunings from maintenance on shoulder.							

Photo 1 of 2: FA_2018_RD0150_16_91_20180910_00057.jpg

Landscaping was obstructing the view of the landside slope of the levee looking downstream. This picture was taken during spring 2013 inspection.

# LM Start 1.32 Rating \*\* U Issue No. 91 (cont) LM End 1.35 Issue Type + En Location \* LS





Landscaping was found landside of the levee looking upstream. Fall 2011

CR : Crown

N : Not Inspected/Rated C : Corrected

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.34	Rating **	М	Issue No.		996		
LM End	1.34	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UC	P Field Study		38.3431	36°	38.343136°		
пеш				-121.5608	68°	-121.560868°		
DWR ID	22393							
Comment Code								

## Inspector Comment

FS\_ID:20727 DS\_ID:22393 EP\_NO: 18221

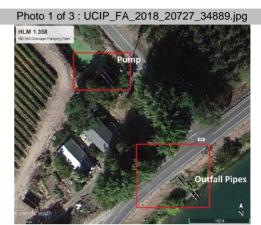
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump house and drainage ditch about 250 feet from the levee on landside.Pumps on piling structure with shed in drainage ditch.Siphon breaker cover missing. Needs to fix it.

FIELD\_STRUCT\_DESC: [Reclamation District No. 150 (RD0150) Drainage Plant] 1 of 2: 30-inch steel drainage discharge pipe through the levee, 7 feet below the crown. Flap gate on the waterside (WS) end. Siphon breaker on the WS slope. Pump on a piling structure with a shed in the drainage ditch. (Plans to replace existing 36-inch and 24-inch discharge pipes with 30-inch and 24-inch steel discharge pipes through the levee authorized under Permit No. 18221, 2007 - RD0150). [Additional Reference(s): DWR Levee Log, 2005, 36-inch pipe referenced, 9 feet below the crown. USACE Sacramento O&M Manual 112, March 1957, (RM 35.36), 36-inch pipe referenced, invert elevation 9 feet below the crown].

FS Date: 8/27/2013

LM Start	1.34	Rating **	М	Issue No.	996 (cont)
LM End	1.34	Issue Type +	En	Location *	



Bird's eye view: outfall pipes (bottom) and pump structure in drainage ditch (top)

### Photo 2 of 3: UCIP\_FA\_2018\_20727\_34888.jpg



WS view: siphon breaker in pipe riser on levee shoulder.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.34	Rating **	М	Issue No.		996 (cont)
LM End	1.34	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCIP Field Study			38.34313	6°	38.343136°
пеш			-121.56086	8 °	-121.560868 °	
DWR ID	22393					

## Inspector Comment

Comment Code

FS\_ID:20727 DS\_ID:22393 EP\_NO: 18221

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump house and drainage ditch about 250 feet from the levee on landside.Pumps on piling structure with shed in drainage

ditch.Siphon breaker cover missing. Needs to fix it.

FIELD\_STRUCT\_DESC: [Reclamation District No. 150 (RD0150) Drainage Plant] 1 of 2: 30-inch steel drainage discharge pipe through the levee, 7 feet below the crown. Flap gate on the waterside (WS) end. Siphon breaker on the WS slope. Pump on a piling structure with a shed in the drainage ditch. (Plans to replace existing 36-inch and 24-inch discharge pipes with 30-inch and 24-inch steel discharge pipes through the levee authorized under Permit No. 18221, 2007 - RD0150). [Additional Reference(s): DWR Levee Log, 2005, 36-inch pipe referenced, 9 feet below the crown. USACE Sacramento O&M Manual 112, March 1957, (RM 35.36), 36-inch pipe referenced, invert elevation 9 feet below the crown].

Photo 3 of 3 : UCIP\_FA\_2018\_20727\_34887.jpg

WS view: submerged flap gate in the stream.

LM Start	1.46	Rating **	С	Issue No.		96	
LM End	1.46	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Animal Co	ontrol		38.344207°		38.344207°	
пеш			-121.5590	72 °	-121.559072°		
DWR ID DWR_RD0150_02_s _ 2018_96							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

* Location	
LS : Land Side WS : Water Side	N/A: Not Applicable
WS: Water Side	

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.73	Rating **	M	Issue No.		48		
LM End	1.73	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory			Start		End			
Encroachments			38.3455	83°	38.345583 °			
пеш	item			-121.554507°		-121.554507°		
DWR ID	DWR ID DWR_RD0150_02_f _ 2014_48							
		Comn	nent Cod	de				
PO : Pole								
Inspector Comment								
A pole was found on the waterside slope of the levee. Most probably is connected to a pump.								



A pole/pipe was found on the waterside slope of the levee looking upstream. Fall 2014

LM Start	1.80	Rating **	М	Issue No.		30			
LM End	2.02	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS Latitude/Longitude					
Calegory			Start		End				
ltem Encroachments				38.3459	37°	38.346786°			
item	item				90°	-121.549332 °			
DWR ID	DWR ID DWR_RD0150_02_f _ 2018_30								
		Comn	nent Cod	de					
PR : Prunings									
Inspector Comment									

No Photos

LM Start	1.81	Rating **	С	Issue No.		101		
LM End	1.81	Issue Type +	Ма	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetation			38.3459	83°	38.345983°		
item				-121.553075 °		-121.553075 °		
DWR ID	DWR_RD0	150_02_s _ 201	8_101					
Comment Code								
V2 : Remove the wild growth other than native grasses from the levee slopes.								

No Photos

* Location	** Deting
<u>'</u>	
Inspecto	r Comment

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.91	Rating **	М	Issue No.		997	
LM End	1.91	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCIP Field Study			38.34644	8 °	38.346448°	
пеш				-121.55129	3°	-121.551293°	
DWR ID	22395						
Comment Code							

## Inspector Comment

FS\_ID:20348 DS\_ID:22395 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Operating during inspection.- Overhead powerline

crossing- CMP riser with siphon breaker needs cleaning.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 4 feet below the crown. Pump on a piling structure in the river. Power poles on both slopes. Ramp on the landside (LS) slope. Siphon breaker on the LS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 35.94)].

FS Date: 8/27/2013

LM Start	1.91	Rating **	М	Issue No.	997 (cont)
LM End	1.91	Issue Type +	En	Location *	



WS view: service pole, pipe & pump on piling structure in the stream.

Photo 2 of 3: UCIP\_FA\_2018\_20348\_34370.jpg



WS view: pipe & pump on piling structure in the stream.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	1.91	Rating **	М	Issue No.		997 (cont)
LM End	1.91	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study				B°	38.346448°
пеш			-121.55129	3°	-121.551293°	
DWR ID	22395					

## Comment Code

### Inspector Comment

FS\_ID:20348 DS\_ID:22395 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Operating during inspection.- Overhead powerline

crossing- CMP riser with siphon breaker needs cleaning.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 4 feet below the crown. Pump on a piling structure in the river. Power poles on both slopes. Ramp on the landside (LS) slope. Siphon breaker on the LS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 35.94)].

FS Date: 8/27/2013

## Photo 3 of 3 : UCIP\_FA\_2018\_20348\_34369.jpg



LS view: concrete distribution box on levee toe.

LM Start	2.10	Rating **	М	Issue No.		63
LM End	2.10	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
ltem Encroachments				38.3470	02°	38.347002°
пеш				-121.5478	03 °	-121.547803°
DWR ID	DWR_RD0	150_02_f _ 201	6_63			

Comment Code

## TR : Tree or limb

### Inspector Comment

### Photo 1 of 1: FA\_2018\_RD0150\_16\_63\_20180910\_00043.jpg



View of a tree trunk on the landside slope of the levee. Spring 2017

LS : Land Side N/A : Not Applicable WS : Water Side

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	2.14	Rating **	М	Issue No.	998			
LM End	2.14	Issue Type +	En	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category					End		
Item	DWR UC	P Field Study		38.34703	2°	38.347032°		
пеш				-121.54715	9°	-121.547159°		
DWR ID	22396							
	Comment Code							

## Inspector Comment

FS\_ID:20731 DS\_ID:22396 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Operating during inspection. Leaky join at the concrete box.- Power overhead crossing. Power pole at waterside

shoulder, and landside toe.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 5 feet below the crown. Slant pump on the waterside (WS) slope. Power pole on the WS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 36.17)].

FS Date: 8/27/2013

LM Start	2.14	Rating **	М	Issue No.	998 (cont)
LM End	2.14	Issue Type +	En	Location *	



WS view: slant pump on steel frame support and exposed pipe on levee slope.

Photo 2 of 3: UCIP\_FA\_2018\_20731\_34901.jpg



LS view: concrete distribution box on levee toe and exposed steel pipe on levee slope.

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	2.14	Rating **	М	Issue No.	,	998 (cont)
LM End	2.14	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category					End
Item	DWR UCI	P Field Study		38.3470	32 °	38.347032°
пеш	item			-121.5471	59°	-121.547159°
DWR ID	22396					·

### Inspector Comment

Comment Code

FS\_ID:20731 DS\_ID:22396 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - Operating during inspection. Leaky join at the concrete box.- Power overhead crossing. Power pole at waterside

shoulder, and landside toe.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 5 feet below the crown. Slant pump on the waterside (WS) slope. Power pole on the WS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 36.17)].

FS Date: 8/27/2013



LS view: leaky concrete distribution box on levee toe.

LM Start	2.14	Rating **	С	Issue No.		68	
LM End	2.14	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Encroach	Encroachments			83°	38.347083°	
item				-121.5470	63 °	-121.547063 °	
DWR ID DWR_RD0150_02_f _ 2017_68							
Comment Code							

PR: Prunings

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	2.20	Rating **	М	Issue No.		99		
LM End	2.22	Issue Type +	En	Location *		LS		
Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.3471	68 °	38.347205°		
пеш				-121.5459	77°	-121.545679°		
DWR ID	DWR ID DWR_RD0150_02_s _ 2018_99							
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				

No Photos

LM Start	2.28	Rating **	М	Issue No.	88		
LM End	2.30	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Vegetatio	n		38.3473	55 °	38.347361 °	
item				-121.5446	28°	-121.544280°	
DWR ID DWR_RD0150_02_s _ 2012_88							
Comment Code							

V6: Landscaping

Inspector Comment



Unpermitted landscaping was found on the landside slope of the levee. The picture was taken from the crown looking upstream. Spring 2011

LM Start	2.40	Rating **	М	Issue No.		98			
LM End	2.46	Issue Type +	En	Location *	LS				
Category Earthen Levee			GPS La	atitud	e/Longitude				
Category				Start		End			
Item	n		38.3475	81°	38.347811°				
пеш				-121.542334°		-121.541273°			
DWR ID	DWR ID DWR_RD0150_02_s _ 2018_98								
		Comn	nent Cod	le					
V6 : Lands	caping								
	Inspector Comment								

No Photos

\* Location LS: Land Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

WS: Water Side

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	2.72	Rating **	М	Issue No.		70
LM End	2.72	Issue Type +	En	Location *		LS
Category	Catagory Earthen Levee			GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments			38.3497	77°	38.349777°
пеш				-121.5372	47°	-121.537247°
DWR ID DWR_RD0150_02_s _ 2017_70						
Comment Code						
TA: Tank						
Inspector Comment						



A tank was found on the landside toe of the levee. Spring 2017

LM Start	2.75	Rating **	N	Issue No.		14	
LM End	2.75	Issue Type +	Ma	Location *	LS		
Category	Earthen L		GPS Latitude/Longitude				
Calegory			Start		End		
Item	Trim / Thin Trees			38.350041 °		38.350041 °	
item			-121.536853 °		-121.536853 °		
DWR ID DWR_RD0150_02_s _ 2012_14							
Comment Code							

T5 : Tree stumps.

Inspector Comment



View of a tree stump on the landward slope.

Photo 1 of 1: FA\_2018\_RD0150\_16\_85\_20180910\_00054.jpg

LM Start	2.97	Rating **	U	Issue No.		85	
LM End	3.01	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Vegetation			38.3523	72°	38.352802	0
nem				-121.5341	27°	-121.533638	0
DWR ID DWR_RD0150_02_s _ 2012_85							
Comment Code							

V6: Landscaping

Inspector Comment



Landscaping providing a screen for a residence on the landside of levee.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

		D // ++					
LM Start	3.08	Rating **	U	Issue No.		95	
LM End	3.10	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	Vegetation			38.3535	41 °	38.353822°	
item				-121.532844 °		-121.532574°	
DWR ID DWR_RD0150_02_s _ 2018_95							
		Comn	nent Cod	de			
V6 : Landscaping							
Inspector Comment							
Trim trees on landside slope.							



Vegetation landside looking southwest. Spring 2018

LM Start	3.24	Rating **	М	Issue No.		961	
LM End	3.24	Issue Type +	Ма	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Erosion / Bank Caving			38.35532	21 °	38.355321 °	
пеш				-121.53090	)2 °	-121.530902 °	
DWR ID	DWR_RD0	150_02_s _ 201	2_961				

### Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

## Photo 1 of 5 : FA\_2018\_RD0150\_16\_961\_20180910\_00065.jpg



View of the erosion on the waterside of the levee during spring 2015 inspection.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.		961 (cont)	
LM End	3.24	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Erosion / Bank Caving			38.3553	21 °	38.355321 °	
пеш				-121.5309	02°	-121.530902 °	
DWR ID	/R ID DWR_RD0150_02_s _ 2012_961						
Comment Code							

E2 : Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

LM Start	3.24	Rating **	М	Issue No.	961 (cont)
LM End	3.24	Issue Type +	Ma	Location *	WS



View of the erosion on the waterside slope of the levee near the pipe looking downstream. This picture was taken during the fall 2013 inspection.

### Photo 3 of 5: FA\_2018\_RD0150\_16\_961\_20180910\_00067.jpg



View of the erosion on the waterside slope of the levee looking upstream during spring 2013 inspection.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.		961 (cont)	
LM End	3.24	Issue Type +	Ma	Location *	WS		
Category	evee	GPS La	atitud	le/Longitude			
Calegory		Start		End			
Item	Erosion /	Bank Caving		38.3553	21 °	38.355321 °	
пеш				-121.5309	02°	-121.530902°	
DWR ID	DWR ID DWR_RD0150_02_s _ 2012_961						
	Comment Code						

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Depressions into the waterward slope can be seen along the waterward slope at this site. Also note the damaged pump support, pump, and pipe just upstream of the site; they may contribute to the erosion in a high water event and should be removed.

LM Start	3.24	Rating **	М	Issue No.	961 (cont)
LM End	3.24	Issue Type +	Ma	Location *	WS

#### Photo 4 of 5: FA\_2018\_RD0150\_16\_961\_20180910\_00068.jpg



View of erosion and damaged pipe and abandoned boat on the waterside of the levee looking upstream. This picture was taken during fall 2012 inspection.

#### Photo 5 of 5: FA\_2018\_RD0150\_16\_961\_20180910\_00069.jpg



View of the erosion site, and broken pump support along with a boat on the waterside of the levee. The picture was taken from the crown looking towards the toe of the levee during fall 2011 inspection.

CR : Crown

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsole

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	М	Issue No.		999	
LM End	3.24	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.35536	o°	38.355360	0
пеш				-121.53083	8°	-121.530838	0
DWR ID	22402						

#### Inspector Comment

Comment Code

FS\_ID:20736 DS\_ID:22402 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 10" steel pipe sleeved through 12" steel pipe.main pipe bifurcates into two pipes on LS slope and contrected to
standpipe and concrete box.- 2" electric conduit on WS and power
pole on LS.- needs filling into gap between 10" and 12" steel pipes on

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 4 feet below the crown. Pump on a piling structure in the river. Concrete standpipe and concrete distribution box at the landside (LS) toe. (A. Green). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 37.30)].

FS Date: 8/30/2013

LM Start	3.24	Rating **	М	Issue No.	999 (cont)
LM End	3.24	Issue Type +	En	Location *	



WS view: pipe, conduit and pump on levee slope.

Photo 2 of 3: UCIP\_FA\_2018\_20736\_34916.jpg



WS view: steel pipe and GI conduit on levee slope.

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.24	Rating **	M	Issue No.		999 (cont)
LM End	3.24	Issue Type +	En	Location *		
Supplemental		plemental			ituc	le/Longitude
Category						End
Item	DWR UCI	P Field Study		38.35536	o°	38.355360°
пеш			-121.53083	8°	-121.530838 °	
DWR ID	22402					

# Comment Code Inspector Comment

FS\_ID:20736 DS\_ID:22402 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 10" steel pipe sleeved through 12" steel pipe.main pipe bifurcates into two pipes on LS slope and contrected to standpipe and concrete box.- 2" electric conduit on WS and power pole on LS.- needs filling into gap between 10" and 12" steel pipes on

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 4 feet below the crown. Pump on a piling structure in the river. Concrete standpipe and concrete distribution box at the landside (LS) toe. (A. Green). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 37.30)].

FS Date: 8/30/2013



WS view: pipe and pump on levee slope. Gate valve and air vent on the pipe.

LM Start	3.30	Rating **	М	Issue No.		17		
LM End	3.30	Issue Type +	Ma	Location *		LS		
Cotogony Earthen Levee				GPS La	atitud	le/Longitude		
Calegory	Category					End		
Item	Vegetatio	n		38.355979°		38.355979°		
пеш				-121.5302	88°	-121.530288°		
DWR ID DWR_RD0150_02_s _ 2012_17								
	Comment Code							
V/A Fld	A Filderbander and block on the War and Control of the							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Elderberry is partially blocking visibility.

No Photos

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.42	Rating **	A/W	Issue No.		47	
LM End	3.46	Issue Type +	Ма	Location *		WS	
Category	Catagori Supplemental					le/Longitude	
Calegory				Start End			
Item	2017 Stor	m Damage		38.3571	83°	38.357631 °	
пеш				-121.5285	47°	-121.527981 °	
DWR ID	WR ID DWR_RD0150_02_f _ 2017_47						
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 229 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:287

Site Designation:LMA-113 Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Crown is a paved road. Erosion scarps upto 10 ft deep and within 5 ft of crown. Worse conditions on the DS end. Exposed filter fabric. Serious because of depth of erosion into levee, weak soil, and proximity to crown which is a high traffic public road.

LM Start	3.42	Rating **	A/W	Issue No.	47 (cont)
LM End	3.46	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL\_FA\_2018\_287\_2146.jpg



CR : Crown

N/A: Not Applicable LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.42	Rating **	A/W	Issue No.		47 (cont)		
LM End	3.46	Issue Type +	Ma	Location *		WS		
Supplemental				GPS La	titud	le/Longitude		
Calegory			Start		End			
ltom	2017 Stor	m Damage		38.35718	3°	38.357631°		
Item				-121.52854	7°	-121.527981°		
DWR ID DWR_RD0150_02_f _ 2017_47								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 229 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:287

Site Designation:LMA-113 Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Crown is a paved road. Erosion scarps upto 10 ft deep and within 5 ft of crown. Worse conditions on the DS end. Exposed filter fabric. Serious because of depth of erosion into levee, weak soil, and proximity to crown which is a high traffic public road.



LM Start	3.50	Rating **	М	Issue No.	1000			
LM End	3.50	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory			Start		End			
Item	DWR UCI	P Field Study		38.3580	94°	38.358094°		
itein			-121.5276	19°	-121.527619°			
DWR ID	22403							
Comment Code								

## Inspector Comment

FS\_ID:19846 DS\_ID:22403 EP\_NO: N/A

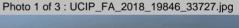
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 8" pvc pipe sleeved into 12" steel pipe.- needs filling/grouting in gas between 8" pvc pipe and 12" steel pipe on WS.-1.5" electric conduit on WS-10" steel pipe extended to 8" pvc pipe on

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 3 feet below the crown. Pump and gate valve on the waterside (WS) slope. (R. and J. Pylman). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 37.56)].

FS Date: 8/30/2013





WS view: pipe, pump, and conduit on levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.50	Rating **	М	Issue No.	1	000 (cont)			
LM End	3.50	Issue Type +	En	Location *					
Category				Supplemental GPS Lat				titud	e/Longitude
Calegory	Category					End			
Item	DWR UCIP Field Study			38.3580	94°	38.358094°			
пеш			-121.5276	19°	-121.527619°				
DWR ID	22403								

## Inspector Comment

Comment Code

FS ID:19846 DS\_ID:22403 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 8" pvc pipe sleeved into 12" steel pipe.- needs filling/grouting in gas between 8" pvc pipe and 12" steel pipe on WS.-1.5" electric conduit on WS- 10" steel pipe extended to 8" pvc pipe on landside levee toe.

FIELD STRUCT DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 3 feet below the crown. Pump and gate valve on the waterside (WS) slope. (R. and J. Pylman). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 37.56)].

FS Date: 8/30/2013

LM Start	3.50	Rating **	М	Issue No.	1000 (cont)
LM End	3.50	Issue Type +	En	Location *	



WS view: steel conduit (right); 8" pvc pipe sleeved into 12" steel pipe.

Photo 3 of 3: UCIP\_FA\_2018\_19846\_33725.jpg



LS view: exposed pipe on levee slope and standpipe on the toe.

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.51	Rating **	М	Issue No.		1001
LM End	3.51	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	DWR UCIP Field Study			38.3581	31 °	38.358131 °
пеш			-121.5275	40°	-121.527540°	
DWR ID	22404					

## Inspector Comment

Comment Code

FS\_ID:19848 DS\_ID:22404 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - needs proper abandonment.
FIELD\_STRUCT\_DESC: \*ABANDONED\* 4-inch steel pipe of an unknown purpose on the landside (LS) slope. 1-inch steel conduit on the waterside (WS) slope was found.

FS Date: 8/30/2013

LM Start	3.51	Rating **	М	Issue No.	1001 (cont)
LM End	3.51	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_FA\_2018\_19848\_33734.jpg



WS view: abandoned 1-inch conduit on levee slope.

Photo 2 of 3: UCIP\_FA\_2018\_19848\_33733.jpg



LS view: exposed 4-inch steel pipe on levee slope.

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.51	Rating **	M	Issue No.	•	1001 (cont)
LM End	3.51	Issue Type +	En	Location *		
Category			GPS La	ituc	le/Longitude	
Calegory	Category					End
Item	DWR UCI	P Field Study		38.35813	1°	38.358131 °
пеш				-121.52754	0 °	-121.527540°
DWR ID	22404					

# Comment Code

#### Inspector Comment

FS\_ID:19848 DS\_ID:22404 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - needs proper abandonment.
FIELD\_STRUCT\_DESC: \*ABANDONED\* 4-inch steel pipe of an unknown purpose on the landside (LS) slope. 1-inch steel conduit on the waterside (WS) slope was found.

FS Date: 8/30/2013

Photo 3 of 3: UCIP_FA_2018_19848_33732.jpg
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LS view: abandoned 4-inch steel pipe on levee slope.

LM Start	3.54	Rating **	U	Issue No.	82		
LM End	3.67	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Item	Vegetation			38.358530°		38.359749	
пеш	item			-121.5271	62 °	-121.525245	
DWR ID DWR_RD0150_02_s _ 2012_82							
Comment Code							

V6: Landscaping

### Inspector Comment



Landscaping was blocking the visibility on the landside of the levee looking upstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	3.84	Rating **	U	Issue No.		80
LM End	3.87	Issue Type +	En	Location *		LS
Category	evee	GPS La	atitud	le/Longitude		
Calegory		Start		End		
Item	Vegetatio		38.3614	42°	38.361812°	
item				-121.523170°		-121.522908°
DWR ID DWR_RD0150_02_s _ 2012_80						
Comment Code						
V6 : Lands	scaping					
		1	0	1		
Inspector Comment						



Landscaping in front of a residence on landside of levee. The levee in this location is greater than 100' wide.

WS ide/Longitude End 38.361970							
End							
° 38.361970°							
° -121.522777°							
DWR ID DWR_RD0150_02_s _ 2012_33							
Comment Code							
ST : Stairway							
Inspector Comment							



A stairway was found on the waterside slope of the levee.

LM Start	4.09	Rating **	М	Issue No.		20		
LM End	4.09	Issue Type +	En	Location *	LS			
Category	evee	GPS La	atitud	le/Longitude				
Category		Start		End				
Item	Encroachments					38.364948 °		
item				-121.5223	39°	-121.522339°		
DWR ID DWR_RD0150_02_s _ 2012_20								
Comment Code								
BU : Buildi	ng							
			_					
		Inspecto	or Comm	nent				
3' retaining	wall at the	e landward sh	oulder.					



View of a retaining wall on the landward slope looking upstream.

* Location	** Rating		+ Issue Type	
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
	_			 

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.11	Rating **	M	Issue No.		953		
LM End	4.11	Issue Type +	En	Location *	LS			
Category	evee	GPS Latitude/Longitude						
Calegory	Category					End		
Item	Vegetatio	n		38.365267°		38.365267°		
пеш			-121.522379°		-121.522379°			
DWR ID DWR_RD0150_02_s _ 2012_953								
Comment Code								
V6 : Landscaping								
Inspector Comment								



View of cacti on the landside of the levee looking from the crown.

LM Start	4.17	Rating **	М	Issue No.	1002		
LM End	4.17	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory		Start		End			
Itom	DWR UCIP Field Study			38.36614	19°	38.366149°	
Item				-121.52235	52°	-121.522352°	
DWR ID	22407						
Comment Code							

### Inspector Comment

FS\_ID:42702 DS\_ID:22407 EP\_NO: 13505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly.- no pipe and structure found on landside.- siphon breaker in 24" CMP riser on waterside.- control box and electric conduit on waterside slope.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, invert elevation 5 feet below the crown. Slant pump on the waterside (WS) slope. Siphon breaker on the WS slope in a corrugated metal pipe (CMP) riser. Control box and electrical conduit on the WS slope. (Plans to replace an existing pipeline with a 14-inch steel pipeline through the levee authorized under Permit No. 13505, 1982 - Gary Pylman). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE Sacramento O&M Manual 112, March 1957, (RM 38.24), 10-inch pipe referenced].

Photo 1 of 3: UCIP\_FA\_2018\_42702\_33782.jpg



WS view: slanted pump on levee slope.

FS Date: 8/30/2013

LS : Land Side N/A : Not Applicable WS : Water Side

#### \* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

### + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.17	Rating **	М	Issue No.		1002 (cont)
LM End	4.17	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	P Field Study		38.3661	49°	38.366149°
пеш				-121.5223	52°	-121.522352 °
DWR ID	22407					

#### Inspector Comment

Comment Code

FS\_ID:42702 DS\_ID:22407 EP\_NO: 13505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly.- no pipe and structure found on landside.- siphon breaker in 24" CMP riser on waterside.- control box and electric conduit on waterside slope.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, invert elevation 5 feet below the crown. Slant pump on the waterside (WS) slope. Siphon breaker on the WS slope in a corrugated metal pipe (CMP) riser. Control box and electrical conduit on the WS slope. (Plans to replace an existing pipeline with a 14-inch steel pipeline through the levee authorized under Permit No. 13505, 1982 - Gary Pylman). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE Sacramento O&M Manual 112, March 1957, (RM 38.24), 10-inch pipe referencedl.

FS Date: 8/30/2013

LM Start	4.17	Rating **	М	Issue No.	1002 (cont)
LM End	4.17	Issue Type +	En	Location *	



WS view: exposed 14-inch steel pipe on levee slope.



WS view: electric control box and electric conduit on levee slope.

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.26	Rating **	U	Issue No.		24
LM End	4.28	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.3674	42°	38.367740°
item				-121.5224	27°	-121.522495°
DWR ID DWR_RD0150_02_s _ 2012_24						
		Comn	nent Cod	de		
V6 : Lands	scaping					
		Inspecto	or Comm	nent		



Landscaping (Oleander) on landward slope

LM Start	4.27	Rating **	М	Issue No.	107		
LM End	4.27	Issue Type +	En	Location *	WS		
Catagory	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Encroach	ments		38.367507° 38.36750		38.367507°	
item				-121.522493 ° -121.52249			
DWR ID DWR_RD0150_02_s _ 2018_107							
Comment Code							

TR : Tree or limb

### Inspector Comment

Remove downed tree on waterside slope.

## Photo 1 of 1: FA\_2018\_RD0150\_16\_107\_20180910\_00062.jpg



View of fallen tree on waterside looking northeast. Spring 2018

Photo 1 of 1: FA\_2018\_RD0150\_16\_79\_20180910\_00051.jpg

LM Start	4.30	Rating **	U	Issue No.		79		
LM End	4.34	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory			Start			End		
Item	Vegetation			38.3680	36°	38.368540°		
item				-121.5226	11 °	-121.522729°		
DWR ID	DWR_RD0	150_02_s _ 201	2_79					
Comment Code								
V6 : Lands	V6 : Landscaping							

Inspector Comment



Trees were obstructing the views on the landside slope of the levee looking downstream.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.50	Rating **	U	Issue No.	44		
LM End	4.57	Issue Type +	Ma	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.3709	28°	38.371909°	
item	DRAFT			-121.523069 ° -121.52331			
DWR ID DWR_RD0150_02_f _ 2018_44							
Comment Code							

#### Inspector Comment

2017 Site ID: SAC 38.5 R

Status: Critical

2017 Field Notes: New erosion pocket. Vertical section along lower

bank, and cracking. Upgraded to critical.

Site History: 1999 - Downstream end (300 ft) repaired with rock. 2010 - Toe erosion, some vertical slopes lower down. 2011 - Failing rock repair. Slumping of the lower bank. Minor new erosion. 2013 - Tree at upstream end has exposed roots. Some new erosion.

Fall 2018 DWR Inspection: Erosion along lower bank and cracking not visible from levee crown due to vegetation.

LM Start	4.50	Rating **	U	Issue No.	44 (cont)
LM End	4.57	Issue Type +	Ma	Location *	WS



View of waterside slope. Fall 2018



View of waterside slope. Fall 2018

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.59	Rating **	С	Issue No.		93		
LM End	4.59	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start	End			
Item	Vegetatio	n		38.372160°		38.372160 °		
пеш				-121.5237	01 °	-121.523701 °		
DWR ID	DWR ID DWR_RD0150_02_s _ 2018_93							
Comment Code								
V2 : Remo	V2 : Remove the wild growth other than native grasses from the levee							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Photo 1 of 1 : FA\_2018\_RD0150\_16\_28\_20180910\_00013.jpg

No Photos



Century plant on waterward slope

	4.00	D-4i**		Innun Nin			
LM Start	4.69	Rating **	М	Issue No.		28	
LM End	4.69	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Vegetatio	n		38.3734	85°	38.373485 °	
item				-121.523963 °		-121.523963 °	
DWR ID DWR_RD0150_02_s _ 2012_28							
		Comn	nent Cod	de			
V2 : Remo	ve the wild	growth other	than na	tive grasses	s fro	m the levee	
	Inspector Comment						

LM Start	4.70	Rating **	U	Issue No.	76	
LM End	4.72	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Vegetatio	n		38.373688°		38.373970°
item				-121.52428	80°	-121.524403 °
DWR ID	DWR_RD0	DWR_RD0150_02_s _ 2012_76				
Comment Code						

V6: Landscaping

Inspector Comment



Trees were obstructing the view of the landside slope of the levee looking upstream.

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	4.86	Rating **	С	Issue No.		90		
LM End	4.89	Issue Type +	Ма	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End			
Item	Vegetatio	n		38.3757	40°	38.376181	0	
пеш				-121.5252	74°	-121.525431	0	
DWR ID	DWR_RD0	150_02_s _ 201	8_90					
		Comn	nent Cod	de				

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	5.04	Rating **	A/W	Issue No.		50	
LM End	5.12	Issue Type +	Ма	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.3783	11°	38.379458	0
пеш						-121.524931	0
DWR ID	DWR_RD0	150_02_f _ 201	7_50				

## Inspector Comment

Comment Code

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 447 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:288

Site Designation:LMA-114

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Much of site was not accessible because of thorny veg. Scarps were only about 1 ft deep where it was accessible so rated it a lower priority. Irrigation pipe within the site. A boat view would be helpful here. Fall 2018 DWR Inspector: Erosion along bank not visible from levee crown.



View of waterside slope with some revetment. Fall 2018

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.04	Rating **	A/W	Issue No.		50 (cont)	
LM End	5.12	Issue Type +	Ma	Location *		WS	
Catagory	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.3783	11 °	38.379458°	
пеш				-121.5253	17°	-121.524931°	
DWR ID DWR_RD0150_02_f _ 2017_50							
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 447 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:288

Site Designation:LMA-114

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Much of site was not accessible because of thorny veg. Scarps were only about 1 ft deep where it was accessible so rated it a lower priority. Irrigation pipe within the site. A boat view would be helpful here. Fall 2018 DWR Inspector: Erosion along bank not visible from levee crown.

LM Start	5.04	Rating **	A/W	Issue No.	50 (cont)
LM End	5.12	Issue Type +	Ma	Location *	WS

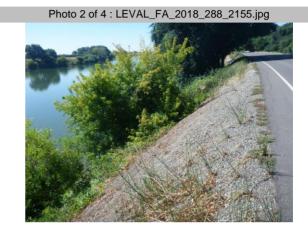


Photo 3 of 4: LEVAL\_FA\_2018\_288\_2156.jpg



\* Location N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.04	Rating **	A/W	Issue No.	e No. 50 (co			
LM End	5.12	Issue Type +	Ма	Location *		WS		
Catagony	Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Stor	m Damage		38.378311°		38.379458°		
пеш				-121.5253	17°	-121.524931 °		
DWR ID	DWR_RD0	150_02_f _ 201						
Comment Code								

#### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 447 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:288

Site Designation:LMA-114

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. Much of site was not accessible because of thorny veg. Scarps were only about 1 ft deep where it was accessible so rated it a lower priority. Irrigation pipe within the site. A boat view would be helpful here. Fall 2018 DWR Inspector: Erosion along bank not visible from levee crown.



LM Start	5.05	Rating **	U	Issue No.		Issue No.		75
LM End	5.14	Issue Type +	En	Location *		LS		
Category	Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End			
Item	Vegetatio	n		38.3785	43°	38.379839°		
пеш			-121.5253	62°	-121.524968 °			
DWR ID	DWR_RD0	150_02_s _ 201	2_75					

## Comment Code

V6: Landscaping

Inspector Comment



View of landscaping along the landward shoulder and slope looking downstream.

N/A: Not Applicable LS: Land Side

WS: Water Side CR : Crown

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.06	Rating **	A/W	Issue No.	40		
LM End	7.81	Issue Type +	Ob	Location *		WS	
Category	Catagoria Earthen Levee				atitud	le/Longitude	
Category		Start		End			
Itom	ltem Vegetation				74°	38.414029	0
пеш					23°	-121.522991	0
DWR ID	DWR_RD0	2_40					
		Comn	nent Cod	de			
V8 : Enviro	onmental F	Requirements.					
Inspector Comment							

No Photos

Rating \*\* Issue No. С 5.20 89 LM Start Location \* LM End 5.20 Issue Type + Ма LS Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.380544° 38.380544° Item -121.524587 ° -121.524587° DWR\_RD0150\_02\_s \_ 2018\_89 DWR ID

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.24	Rating **	М	Issue No.		1003
LM End	5.24	Issue Type +	En	Location *		
Category	Supplemental			GPS La	itude/Longitude	
Calegory				Start		End
Item	DWR UCI	DWR UCIP Field Study				38.381079°
пеш			-121.52416	6°	-121.524166°	
DWR ID	22410					

#### Inspector Comment

Comment Code

FS\_ID:20740 DS\_ID:22410 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 2" electric conduit and gate valve on WS.-abandoned old pump not removed from WS- working during field

survey

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe and a 2-inch electrical conduit through the levee, invert elevation 3 feet below the crown. Service pole and standpipe at the landside (LS) toe. (C. Sakai). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 39.32)].

FS Date: 8/30/2013

LM Start	5.24	Rating **	М	Issue No.	1003 (cont)
LM End	5.24	Issue Type +	En	Location *	



WS view: pipe, walkway, slant pump & pump platform on stream bank.

Photo 2 of 3: UCIP\_FA\_2018\_20740\_34940.jpg



WS view: pipe, slant pump & pump platform on stream bank.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.24	Rating **	М	Issue No.	1	1003 (cont)
LM End	5.24	Issue Type +	En	Location *		
Category	Supplemental			GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	DWR UCIP Field Study			'9	38.381079 °
пеш				-121.52416	6°	-121.524166 °
DWR ID	22410					

#### Inspector Comment

Comment Code

FS\_ID:20740 DS\_ID:22410 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 2" electric conduit and gate valve on WS.-abandoned old pump not removed from WS- working during field

survey

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe and a 2-inch electrical conduit through the levee, invert elevation 3 feet below the crown. Service pole and standpipe at the landside (LS) toe. (C. Sakai). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 39.32)].

FS Date: 8/30/2013



WS view: steel steps to pump platform, exposed steel pipe, and electric conduit on levee slope.

LM Start	5.24	Rating **	М	Issue No.		975
LM End	5.24	Issue Type +	Ma	Location *		WS
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start		End
Item	Slope Sta	Slope Stability			26°	38.381126°
пеш				-121.5242	07°	-121.524207°
DWR ID	DWR_RD0	150_02_s _ 201	3_975			

#### S1: Repair slope instability.

#### Inspector Comment

Comment Code

Depression on the waterward slope at the shoulder over an irrigation pipe.

#### Photo 1 of 2: FA\_2018\_RD0150\_16\_975\_20180910\_00070.jpg



View of minor slope instability on the waterside slope of the levee looking downstream during fall 2013 inspection.

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.24	Rating **	М	Issue No.		975 (cont)
LM End	5.24	Issue Type +	Ma	Location *		WS
Category	Earthen Levee				titud	e/Longitude
Calegory				Start		End
Item	Slope Stability			38.3811	26 °	38.381126°
item				-121.5242	07°	-121.524207 °
DWR ID	DWR_RD0150_02_s _ 2013_975					
		Comn	nent Cod	de		
S1 : Repai	r slope ins	tability.				
Inspector Comment						
Depression pipe.	n on the wa	aterward slop	e at the	shoulder ov	er a	n irrigation



View of a minor depression along the landward slope of the levee over a pipe penetration looking downstream.

LM Start	5.27	Rating **	С	Issue No.		87
LM End	5.27	Issue Type +	Ма	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Category			Start		End	
Item	Vegetatio	n		38.3815	24°	38.381524°
item				-121.5238	83°	-121.523883 °
DWR ID	DWR_RD0150_02_s _ 2018_87					
Comment Code						

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	5.29	Rating **	M	Issue No.		109	
LM End	5.29	Issue Type +	Ма	Location *		WS	
Category	Catagory Earthen Levee				atitud	e/Longitude	
Category		Start		End			
Item	Slope Stability			38.3816	60°	38.381660	0
пеш			-121.5237	26°	-121.523726	0	
DWR ID DWR_RD0150_02_s _ 2018_109							
Comment Code							

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	II · I Inaccentable	A/W · Accentable but Monitor & Maintain	En : Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.33	Rating **	М	Issue No.		54			
LM End	LM End 5.33 Issue Type + Ma Location * WS								
Category Earthen Levee GPS Latitude/Longitude									
Start End									
Slope Stability 38.382072 ° 38.382072 °									
-121.523220 ° -121.523220 °									
DWR ID DWR_RD0150_02_f _ 2014_54									
Comment Code									
S2 : Repair the levee slope damaged by foot traffic and prevent access									

where possible.

Inspector Comment



View of slope instability on the waterside of the levee looking towards the toe. Fall 2014

LM Start 5.39 Rating ** U Issue No. 74										
LM End	5.40	Location *		LS						
Category Earthen Levee GPS Latitude/Longitude										
Calegory			Start		End					
Vegetation 38.382675 ° 38.382793 °										
-121.522367 ° -121.522164 °										
DWR ID DWR_RD0150_02_s _ 2012_74										
Comment Code										

V6: Landscaping

Inspector Comment

Landowner needs to trim and thin landscaping.



View of dense landscaping on levee slope. Fall 2018

LM Start	5.44	Rating **	U	Issue No.		86			
LM End 5.44 Issue Type + En Location * LS									
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Category	Start End								
Item	Encroachments 38.383127° 38.383127°								
пеш	-121.521603 ° -121.521603 °								
DWR ID DWR_RD0150_02_s _ 2018_86									
	Comment Code								

FW: Firewood

#### Inspector Comment

Firewood at landside toe and fruit tree on levee slope are not permitted and need to be removed.



View of firewood at levee toe and fruit tree on levee slope. Fall 2018

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	5.85 Rating ** A/W Issue No. 51								
LM End		Issue Type +	Location *	LS					
Catagony	Category Supplemental GPS Latitude/Longitude								
Start									
Item	11°		0						
пеш				-121.51628	84 °		0		
DWR ID DWR_RD0150_02_f _ 2017_51									
	Comment Code								

No Photos

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:209

Site Designation:306-135 Repair Type: Seepage

Rating: Field Date:

Notes: Fall 2018 DWR Inspector: End LM was not provided.

LM Start	5.90	Rating **	М	Issue No.		52			
LM End	5.90 Issue Type + Ma Location * LS								
Category	Earthen L	evee		GPS Latitude/Longitude					
Start End									
Item Erosion / Bank Caving 38.387915 38.387915									
-121.516002 ° -121.516002 °									
DWR ID	DWR ID DWR_RD0150_02_f _ 2016_52								
		Comn	nent Cod	de					
E2 : Sched	E2 : Schedule repair of erosion site prior to the next inspection.								
Inspector Comment									
Repair ero	Repair erosion due to runoff.								



View of erosion due to runoff. Fall 2018

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM End	LM Start	5.90	Rating **	М	Issue No.		52 (cont)		
Category  Earthen Levee  GPS Latitude/Longitude Start  End  38.387915 ° 38.387915 ° -121.516002 °  DWR ID DWR_RD0150_02_f _ 2016_52  Comment Code  E2 : Schedule repair of erosion site prior to the next inspection.	LIVI Start	3.30							
Start   End   38.387915   38	LM End	5.90	Issue Type +	Ma	Location *		LS		
Start   End   38.387915   38									
DWR ID DWR_RD0150_02_f _ 2016_52  Comment Code  E2 : Schedule repair of erosion site prior to the next inspection.  Inspector Comment	Odlogory				Start		End		
DWR ID DWR_RD0150_02_f _ 2016_52  Comment Code  E2 : Schedule repair of erosion site prior to the next inspection.  Inspector Comment	Erosion / Bank Caving 38.387915 ° 38.387915 °								
Comment Code E2 : Schedule repair of erosion site prior to the next inspection. Inspector Comment									
E2 : Schedule repair of erosion site prior to the next inspection.  Inspector Comment	DWR ID DWR_RD0150_02_f _ 2016_52								
Inspector Comment		Comment Code							
•	E2 : Sched	E2 : Schedule repair of erosion site prior to the next inspection.							
Repair erosion due to runoff.	Inspector Comment								
	Repair erosion due to runoff.								



View of the erosion on the landside of the levee during spring 2017 inspection.

LM Start	LM Start 6.13 Rating ** M Issue No. 1004									
LM End	LM End 6.13 Issue Type + En Location *									
Category	Suppleme	ental		GPS La	tituc	le/Longitude				
Start End										
Item	DWR UCIP Field Study 38.391099 ° 38.391099 °									
пеш	-121.514913 ° -121.514913 °									
DWR ID 22412										
	Comment Code									

#### Inspector Comment

FS\_ID:20748 DS\_ID:22412 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - slope erosion due leaky siphon breaker at CMP riser- leaky pipe and pump- service pole on LS- 2" electric conduit on WS

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe and an electrical conduit through the levee, invert elevation 4.8 feet below the crown. Slant pump on the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Slope erosion on the LS at the siphon breaker. (Ed Boyles). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 40.22)].

FS Date: 8/30/2013



WS view: steel pipe and slant pump on levee slope.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.13	Rating **	M	Issue No.	1	004 (cont)
LM End	6.13	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.39109	9°	38.391099°
пеш				-121.51491	3°	-121.514913°
DWR ID	22412					·

# Comment Code

Inspector Comment

FS ID:20748 DS\_ID:22412 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - slope erosion due leaky siphon breaker at CMP riser- leaky pipe and pump- service pole on LS- 2" electric conduit

on WS

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe and an electrical conduit through the levee, invert elevation 4.8 feet below the crown. Slant pump on the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Slope erosion on the LS at the siphon breaker. (Ed Boyles). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 40.22)].

FS Date: 8/30/2013

LM Start	6.13	Rating **	М	Issue No.	1004 (cont)
I M End	6.13	Issue Type +	En	Location *	

Photo 2 of 3: UCIP\_FA\_2018\_20748\_34966.jpg



WS view: leaky steel pipe and slant pump on levee slope.

Photo 3 of 3: UCIP\_FA\_2018\_20748\_34965.jpg



LS view: siphon breaker in CMP riser (left) on levee slope and concrete standpipe at levee toe (right).

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

		D (1) ++		I N			
LM Start	6.30	Rating **	М	Issue No.		27	
LM End	6.30	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	า		38.3936	55°	38.393655°	
пеш				-121.514654°		-121.514654°	
DWR ID DWR_RD0150_02_s _ 2012_27							
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			
Century plant on the landward slope.							

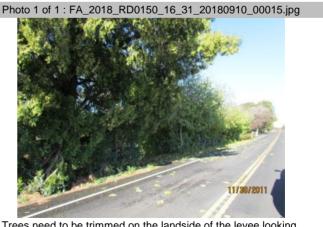


Century plant was found on the landside of the levee looking upstream. Fall 2011

LM Start	6.32	Rating **	М	Issue No.		29		
LM End	6.32	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.3938	850°	38.393850°		
item				-121.514629°		-121.514629°		
DWR ID	DWR ID DWR_RD0150_02_s _ 2012_29							
		Comn	nent Cod	de				
V6 : Lands	caping							
			_					
		Inspecto	or Comm	nent				

No Photos

-								
LM Start	6.36	Rating **	U	Issue No.		31		
LM End	6.36	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory		Start		End				
Item	Vegetatio	n		38.3944	16°	38.394416°		
пеш				-121.514590 °		-121.514590°		
DWR ID	DWR_RD0	150_02_s _ 201	2_31					
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				



Trees need to be trimmed on the landside of the levee looking upstream. Fall 2011

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.39	Rating **	U	Issue No.		65	
LM End	6.46	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.3949	35°	38.395931 °	
пеш				-121.514597°		-121.514604°	
DWR ID DWR_RD0150_02_s _ 2012_65							
		Comn	nent Cod	de			
V6 : Lands	caping						
			_				
		Inspecto	or Comm	nent			



View of landscaping along the landside shoulder and slope looking downstream.

LM Start	6.42	Rating **	М	Issue No.		34		
LM End	6.42	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.3953	40°	38.395340°		
item				-121.514528°		-121.514528°		
DWR ID DWR_RD0150_02_s _ 2012_34								
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				



Landscaping was found on the waterside of the levee looking upstream. Fall 2011

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

		Ti .				
LM Start	6.48	Rating **	М	Issue No.		42
LM End	6.48	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.3962	35°	38.396235
item				-121.5145	47°	-121.514547
DWR ID	DWR_RD0	150_02_s _ 201	2_42			
		Comn	nent Cod	de		
ST : Stairv	vay					
		Inspect	or Comm	nent		
Unpermitted stairway.						



A stairway was found on the waterside slope of the levee looking upstream.

LM Start	6.50	Rating **	М	Issue No.		1005	
LM End	6.50	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Category	Start End						
Item	DWR UCI	P Field Study		38.396449 °		38.396449°	
пеш				-121.5145	16°	-121.514516°	
DWR ID 22413							
Comment Code							

#### Inspector Comment

FS ID:50669 DS\_ID:22413 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/09/2016 Per FPIIB Inspector Pavel Kazi, the CMP riser has been removed and the pipe is now exposed. Pipe still requires proper abandonment. (K. Fazel - UCIP)08/30/2013 Only an abandoned and dismantled CMP riser with gate valve found on WS levee slope. May need proper abandonement. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe, 10 feet below the crown. Gate valve on each end, though only one was found on the waterside (WS) in 2013. Pump on the landside (LS), 10 feet from the LS toe, not found in 2013. Riser on the WS slope has been removed as of the 2016 inspection. (C. Godfrey). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 40.60), referenced as invert elevation 8.5 feet below the crown]. FS Date: 11/9/2016

Photo 1 of 3: UCIP\_FA\_2018\_50669\_34985.jpg



WS view: an abandoned and dismantled CMP riser on WS levee slope.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.50	Rating **	М	Issue No.	1	005 (cont)	
LM End	6.50	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.3964	49°	38.396449°	
пеш				-121.5145	16°	-121.514516°	
DWR ID	22413					·	

## Inspector Comment

Comment Code

FS\_ID:50669 DS\_ID:22413 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/09/2016 Per FPIIB Inspector Pavel Kazi, the CMP riser has been removed and the pipe is now exposed. Pipe still requires proper abandonment. (K. Fazel - UCIP)08/30/2013 Only an abandoned and dismantled CMP riser with gate valve found on WS levee slope. May need proper abandonement. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe, 10 feet below the crown. Gate valve on each end, though only one was found on the waterside (WS) in 2013. Pump on the landside (LS), 10 feet from the LS toe, not found in 2013. Riser on the WS slope has been removed as of the 2016 inspection. (C. Godfrey). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 40.60), referenced as invert elevation 8.5 feet below the crown].

LM Start	6.50	Rating **	М	Issue No.	1005 (cont)
LM End	6.50	Issue Type +	En	Location *	



WS view: closer view of an abandoned and dismantled CMP riser on WS levee slope.

#### Photo 3 of 3: UCIP FA 2018 50669 34983.jpg



WS view: an abandoned and dismantled CMP riser with gate valve handle on WS levee slope.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.50	Rating **	U	Issue No.	55		
LM End	6.50	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.3965	18°	38.396518°	
пеш				-121.514530°		-121.514530 °	
DWR ID	DWR_RD0	150_02_f _ 201	4_55				
		Comn	nent Cod	de			
PI : Pipe							
Inspector Comment							

The pipe gate needs to be covered on the waterside toe of the levee.



An open pipe valve was found without a cover on the waterside toe of the levee. Fall 2014

LM Start	6.57	Rating **	М	Issue No.	1006	
LM End	6.57	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atituc	le/Longitude
Category	Start End					
Item	DWR UCI	P Field Study		38.3974	51 °	38.397451°
пеш				-121.5146	01 °	-121.514601°
DWR ID 22425						
Comment Code						

## Inspector Comment

FS\_ID:41720 DS\_ID:22425 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to clear dense vegetation on WS.- water filtration plant on LS levee toe.- Slide gate on CMP riser on WS. FIELD\_STRUCT\_DESC: 8-inch irrigation discharge pipe of an unknown material through the levee, 12 feet below the crown. Gate valve in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pump at the landside (LS) toe. (Joe Gomez). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 8/30/2013

Photo 1 of 2 : UCIP\_FA\_2018\_41720\_34081.jpg



WS view: CMP riser with gate valve on levee slope. Dense vegetation on levee slope and stream bank.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.57	Rating **	М	Issue No.	•	1006 (cont)
LM End	6.57	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Lat	titud	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		38.39745	i1°	38.397451 °
пеш				-121.51460	11°	-121.514601 °
DWR ID	22425					

#### Comment Code

#### Inspector Comment

FS\_ID:41720 DS\_ID:22425 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to clear dense vegetation on WS.- water filtration plant on LS levee toe.- Slide gate on CMP riser on WS. FIELD\_STRUCT\_DESC: 8-inch irrigation discharge pipe of an unknown material through the levee, 12 feet below the crown. Gate valve in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pump at the landside (LS) toe. (Joe Gomez). [Additional Reference(s): DWR Levee Log, 2005].

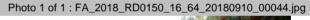
FS Date: 8/30/2013



LS view: concrete vault, pipe, and pump in water filtration plant.

LM Start	6.57	Rating **	U	Issue No.		64		
LM End	6.61	Issue Type +	En	Location *		LS		
Category	Earthen L	evee	GPS Latitude/Longitude					
Category				Start		End		
Item	Vegetatio	38.397523°		38.398000°				
пеш				-121.5146	58°	-121.514731 °		
DWR ID	ID DWR_RD0150_02_s _ 2012_64							
	Comment Code							
V6 · Lands	V6 · Landscaping							

### Inspector Comment





Dense landscaping providing a screen for a residence on landside of

CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.65	Rating **	М	Issue No.		43
LM End	6.68	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.3986	° 000	38.399042°
item				-121.514793°		-121.514841 °
DWR ID	DWR_RD0	150_02_s _ 201	2_43			
		Comn	nent Cod	de		
V6 : Lands	caping					
Inspector Comment						
Landscaping and century plant on landside of the levee.						



Century plants were found on the landside of the levee looking upstream.

Photo 1 of 3: UCIP\_FA\_2018\_41646\_34102.jpg

LM Start	6.69	Rating **	М	Issue No.	1007		
LM End	6.69	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCIP Field Study			38.39916	7°	38.399167°	
пеш				-121.51479	3°	-121.514793°	
DWR ID	22426						
Comment Code							

FS\_ID:41646 DS\_ID:22426 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - abandoned very old gate valve also found on WS. Rest of pipe should be evaluated due to its age.

FIELD\_STRUCT\_DESC: 9-inch steel irrigation discharge pipe through the levee, invert elevation 9.7 feet below the crown. Gate valve and pump house on the landside (LS). (Retention of an irrigation pumping plant with a centrifugal pump on the LS levee slope with a 9-inch pipe through the levee authorized under Automatic Board Order (ABO) issued as Permit No. 8551, 1973 - Albert Souza). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (RM 40.79)]. FS Date: 8/30/2013

Inspector Comment

WS view: inlet steel pipe on stream bank.

Location LS: Land Side N/A: Not Applicable

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

WS: Water Side

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.69	Rating **	М	Issue No.	1	007 (cont)
LM End	6.69	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCIP Field Study			38.3991	67°	38.399167°
пеш				-121.5147	93°	-121.514793°
DWR ID	22426					·

## Inspector Comment

Comment Code

FS\_ID:41646 DS\_ID:22426 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - abandoned very old gate valve also found on WS.

Rest of pipe should be evaluated due to its age.

FIELD\_STRUCT\_DESC: 9-inch steel irrigation discharge pipe through the levee, invert elevation 9.7 feet below the crown. Gate valve and pump house on the landside (LS). (Retention of an irrigation pumping plant with a centrifugal pump on the LS levee slope with a 9-inch pipe through the levee authorized under Automatic Board Order (ABO) issued as Permit No. 8551, 1973 - Albert Souza). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 40.79)].

FS Date: 8/30/2013

LM Start	6.69	Rating **	М	Issue No.	1007 (cont)
LM End	6.69	Issue Type +	En	Location *	



WS view: An abandoned old gate valve on inlet steel pipe on stream bank.

#### Photo 3 of 3: UCIP\_FA\_2018\_41646\_34100.jpg



LS view: concrete masonry distribution box (top), steel pipe, gate valve, air vent, and pump (left) on levee toe.

## **Levee Inspection Report By Mile - Fall 2018**

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	6.73	Rating **	М	Issue No.		111	
LM End	6.73	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
ltom	Animal Control			38.39983	38°	38.399838°	
Item				-121.51489	98°	-121.514898 °	
DWR ID	DWR_RD0150_02_s _ 2018_111						

#### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Possible rodent hole or sinkhole forming on waterside shoulder needs to be repaired.



View of possible animal hole on waterside looking east. Spring 2018

LM Start	6.76	Rating **	U	Issue No.	60		
LM End	6.93	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetation			38.4002	84°	38.402613°	
item				-121.5150	19°	-121.515863°	
DWR ID	DWR_RD0150_02_s _ 2012_60						
Comment Code							

V6: Landscaping

### Inspector Comment

## Photo 1 of 1: FA\_2018\_RD0150\_16\_60\_20180910\_00042.jpg



View of dense landscaping providing a screen for a residence on the landside of levee.

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.00	Rating **	U	Issue No.		1008
LM End	7.00	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study			38.4035	13 °	38.403513°
пеш				-121.5161	62 °	-121.516162°
DWR ID	22429					·

#### Inspector Comment

Comment Code

FS ID:53333 DS\_ID:22429 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/5/2018 Pump in operation at time of inspection. Pipe on WS has significant leak; spilling onto a pile of brush so erosion appears limited, if at all. LS does not appear to have any pipe leaks or levee erosion. Pipe is approximately 85 years and should be internally inspected, and possibly replaced completely, and crossing remains Urgent (DWR UCIP - D. Sanoski).

FIELD\_STRUCT\_DESC: 8-inch concrete encased steel irrigation discharge pipe through the levee, 10 feet below the crown. Pump on a concrete slab and a slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe through the levee section is encased in reinforced concrete. Concrete standpipe at the landside (LS) toe. (A. Monice). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 41.10), referenced as invert elevation 8.2 feet below the crown].

FS Date: 6/5/2018 1:46:00 PM

LM Start	7.00	Rating **	U	Issue No.	1008 (cont)
LM End	7.00	Issue Type +	En	Location *	



WS view: CMP riser with slide gate and pump (right) on levee slope.

#### Photo 2 of 3: UCIP\_FA\_2018\_53333\_34161.jpg



WS view: steel intake pipe and pump on levee slope. Dense vegetation on levee slope.

Location LS: Land Side N/A: Not Applicable WS: Water Side

CR : Crown

Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.00	Rating **	U	Issue No.	1008 (cont)		
LM End	7.00	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	DWR UCIP Field Study			38.40351	3°	38.403513	0
Item				-121.51616	2 °	-121.516162	0
DWR ID	22429						

#### Inspector Comment

Comment Code

FS\_ID:53333 DS\_ID:22429 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 6/5/2018 Pump in operation at time of inspection. Pipe on WS has significant leak; spilling onto a pile of brush so erosion appears limited, if at all. LS does not appear to have any pipe leaks or levee erosion. Pipe is approximately 85 years and should be internally inspected, and possibly replaced completely, and crossing remains Urgent (DWR UCIP - D. Sanoski).

FIELD\_STRUCT\_DESC: 8-inch concrete encased steel irrigation discharge pipe through the levee, 10 feet below the crown. Pump on a concrete slab and a slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe through the levee section is encased in reinforced concrete. Concrete standpipe at the landside (LS) toe. (A. Monice). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 41.10), referenced as invert elevation 8.2 feet below the crown].

FS Date: 6/5/2018 1:46:00 PM



WS view: pump on levee slope. Dense vegetation on levee slope.

LM Start	7.01	Rating **	U	Issue No.		58
LM End	7.01	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			38.40363	31°	38.403631 °
				-121.51629	99°	-121.516299°
DWR ID	DWR_RD0150_02_s _ 2012_58					
Comment Code						
V6 : Landscaping						

Inspector Comment



Photo 1 of 1: FA\_2018\_RD0150\_16\_58\_20180910\_00039.jpg

View of dense landscaping on levee slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.06	Rating **	М	Issue No.		71	
LM End	7.06	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thin Trees			38.4043	38°	38.404338°	
пеш	lem			-121.516625 °		25 ° -121.516625 °	
DWR ID	DWR_RD0	150_02_s _ 201	8_71				
		Comn	nent Coc	de			
T1 : Trim t	rees to at l	east five feet	above g	round level.			
	Inspector Comment						

No Photos

LM Start	7.17	Rating **	A/W	Issue No.	53			
LM End	7.23	Issue Type +	Ma	Location *	* WS			
Category				GPS Latitude/Longitude				
Category	Category			Start		End		
Item	2017 Stor	m Damage		38.40593	33°	38.406722°		
пеш			-121.51719	97°	-121.517617°			
DWR ID	ID DWR_RD0150_02_f _ 2017_53							
Comment Code								

### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.



View of waterside slope with some revetment. Fall 2018

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.17	Rating **	A/W	Issue No.		53 (cont)	
LM End	7.23	Issue Type +	Ma	Location * WS		WS	
Category			GPS La	atitud	e/Longitude		
Calegory	alegory			Start		End	
Item	2017 Stor	m Damage		38.405933 °		38.406722°	
item			-121.5171	97°	-121.517617°		
DWR ID DWR_RD0150_02_f _ 2017_53							
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.

LM Start	7.17	Rating **	A/W	Issue No.	53 (cont)
LM End	7.23	Issue Type +	Ma	Location *	WS



Photo 3 of 4: LEVAL\_FA\_2018\_289\_2165.jpg



# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.17	Rating **	A/W	Issue No.		53 (cont)	
LM End	7.23	Issue Type +	Ma	Location * WS		WS	
Category			GPS La	atitud	e/Longitude		
Calegory	alegory			Start		End	
Item	2017 Stor	m Damage		38.405933 °		38.406722°	
item			-121.5171	97°	-121.517617°		
DWR ID DWR_RD0150_02_f _ 2017_53							
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description: The flood damage consists of a waterside erosion approximately 311 feet long on the west (right) bank of the Sacramento River. See attached pages for photos.

Site ID No:289

Site Designation:LMA-115

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017

Notes: Crown is a paved road. 2 scarps 6 ft deep and about 15 ft long each within site and 6 ft from crown, otherwise erosion was pretty small. Rip rap on 3/4 of slope here, but not full coverage. Area of concern because deeper scarps only extended a short distance.



LM Start	7.22	Rating **	M	Issue No.		32		
LM End	7.22	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.40645	54°	38.406454	0	
item				-121.51773	32 °	-121.517732	0	
DWR ID DWR_RD0150_02_s _ 2012_32								
Comment Code								

V4: Elderberries are blocking visibility and flood fight capability.

### Inspector Comment

No Photos

\* Location LS: Land Side WS: Water Side

CR : Crown

N/A: Not Applicable

A: Acceptable Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento River	Right	7.81	11/09/2018 11/09/2018	Luz Dial

LM Start	7.25	Rating **	М	Issue No.		62	
LM End	7.30	Issue Type +	En	Location *		LS	
Cotogony	Earthen Levee			GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.4069	20°	38.407604	0
item				-121.5179	45 °	-121.518332	0
DWR ID	DWR_RD0	150_02_s _ 201	8_62				
		Comn	nent Cod	de			
V6 : Lands	caping						Т
		Inspecto	or Comm	nent			

No Photos

LM Start	7.77	Rating **	С	Issue No.	41		
LM End	7.77	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory	egory			Start		End	
Item	Vegetation			38.41356	63°	38.413563°	
пеш				-121.52259	93°	-121.522593°	
DWR ID	DWR_RD0	150_02_s _ 201	3_41				
		Comn	nent Cod	le			
V6 : Lands	caping						

Inspector Comment

No Photos

LM Start	7.79	Rating **	М	Issue No.		56	
LM End	7.79	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.4137	05°	38.413705°	
itom				-121.522806 °		° -121.522806°	
DWR ID	DWR_RD0	150_02_s _ 201	2_56				
		Comm	nent Cod	de			
V6 : Lands	caping						
			_				
		Inspecto	or Comm	nent			



Landscaping on landside of levee

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable A: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable U: Unacceptable U: Unacceptable AW: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# **Unit Cover Sheet**

Fall 2018 Levee Inspection Results

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles
Unit No. 03 Elk Slough	Left	9.41

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M *	
Date of Inspection	4/26/2018 - 4/27/2018		11/9/2018 - 11/9/2018	
DWR Inspector	Dave Torres		Luz Dial	
Accompanied By	David Julian DWR		Michael Moncrief MBK	

<sup>\*</sup> Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.

### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.01	Rating **	A/W	Issue No.		22	
LM End	7.80	Issue Type +	Ma	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.3327	35°	38.406923	0
item	DRAFT			-121.58362	25 °	-121.542640	0
DWR ID	DWR ID DWR_RD0150_03_f _ 2018_22						

No Photos

Inspector Comment

Comment Code

2017 Site ID: ELK 0.2 L Status: Eroding

. . . . . .

2017 Field Notes: Fresh erosion; site continues to worsen.

D-45-- \*\*

Site History: 1997 - Most of lower Elk Slough contains high near vertical banks, with erosion into the levee slope. Channel almost appears incised. 2002 - Sites where the levee slope is near vertical and severely eroding. It could fail catastrophically. 2004 - Looks bad in terms of vertical slopes and fallen trees. 2005 - Banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2006 - Both banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2010 - The entire reach is in poor condition, with severely eroding near vertical slopes, needs a regional repair. 2011 - Channel banks are still oversteepened with erosion continuing. 2012 - New cracks and animal holes observed.

LM Start	0.11	Rating ""	C	issue ivo.	43		
LM End	0.20	Issue Type +	Ma	Location *	CR		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetatio	n		38.334220°		38.335449°	
item				-121.58338	31 °	-121.582863°	
DWR ID	DWR ID DWR_RD0150_03_s _ 2018_43						
Comment Code							
V9 : Keep	V9 : Keep the crown roadway free of vegetation.						

Inspector Comment

Inner NI

No Photos

CR : Crown

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.11	Rating **	М	Issue No.		936
LM End	0.11	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.3342	33°	38.334233 °
пеш				-121.5834	14°	-121.583414°
DWR ID	DWR_RD0	150_03_s _ 201	2_936			
		Comn	nent Coc	de		
V4 : Elderk	perries are	blocking visib	ility and	flood fight	сара	ability.
Inspector Comment						
Elderberries are partially blocking visibility.						

No Photos

LM Start	0.39	Rating **	М	Issue No.		951	
LM End	0.39	Issue Type +	En	Location *			
Category	Suppleme		GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCI	P Field Study		38.33792	3°	38.337928	0
пеш				-121.58149	o°	-121.581496	0
DWR ID	22453						

### Comment Code

### Inspector Comment

FS\_ID:42694 DS\_ID:22453 EP\_NO: 13612

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned. Proper abandone needs.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel gravity irrigation pipe through the levee, 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Runyon). [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 8/20/2013



WS view: pipe and pump on levee slope.

# **Levee Inspection Report By Mile - Fall 2018**

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.39	Rating **	М	Issue No. 951 (cont)		951 (cont)
LM End	0.39	Issue Type +	En	Location *		
Category	Supplemental GPS Latitude/L				le/Longitude	
Calegory				Start End		
Itom	DWR UC	P Field Study		38.33792	B°	38.337928
пеш	Item				6°	-121.581496
DWR ID 22453						
	Comment Code					

# Inspector Comment

FS\_ID:42694 DS\_ID:22453 EP\_NO: 13612

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Abandoned. Proper abandone needs. FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel gravity irrigation pipe through the levee, 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Runyon). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/20/2013

L	M Start	0.39	Rating **	М	Issue No.	951 (cont)
L	.M End	0.39	Issue Type +	En	Location *	



WS view: safety valve on steel pipe.

# Photo 3 of 3: UCIP\_FA\_2018\_42694\_32003.jpg



WS view: abandoned pipe, gate valve, and pump on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.40	Rating **	М	Issue No.		952
LM End	0.40	Issue Type +	En	Location *		
Category				GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		38.33813	1 °	38.338131 °
пеш				-121.58143	4 °	-121.581434°
DWR ID	22454					

### Inspector Comment

Comment Code

FS\_ID:42693 DS\_ID:22454 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Seems to be abandoned. Service pole on LS slope.

1" conduit through levee.May need proper abandonment.
FIELD\_STRUCT\_DESC: 6-inch steel irrigation discharge pipe through

the levee, 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Gentner). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/20/2013

LM Start	0.40	Rating **	М	Issue No.	952 (cont)
LM End	0.40	Issue Type +	En	Location *	



LS view: service pole on levee slope.

# Photo 2 of 3: UCIP\_FA\_2018\_42693\_31978.jpg



LS view: no pipe on levee slope.

# **Levee Inspection Report By Mile - Fall 2018**

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.40	Rating **	М	Issue No.		952 (cont)	
LM End	0.40	Issue Type +	En	Location *			
Supplemental				GPS Lati	tud	e/Longitude	
Category	ategory					End	
Item	DWR UCI	IP Field Study		38.33813	1°	38.338131	0
пеш				-121.58143	1°	-121.581434	0
DWR ID	22454						

### Inspector Comment

Comment Code

FS\_ID:42693 DS\_ID:22454 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Seems to be abandoned. Service pole on LS slope.

1" conduit through levee.May need proper abandonment. FIELD\_STRUCT\_DESC: 6-inch steel irrigation discharge pipe through the levee, 3.5 feet below the crown. Pump and gate valve on the waterside (WS) slope. (Gentner). [Additional Reference(s): DWR Levee

Log, 2005]. FS Date: 8/20/2013 Photo 3 of 3: UCIP\_FA\_2018\_42693\_31977.jpg



WS view: pipe and pump on levee slope.

LM Start	0.81	Rating ^^	C	issue No.		44		
LM End	0.83	Issue Type +	Ma	Location *		CR		
Category	evee	GPS Latitude/Longitude						
Category				Start		End		
Item		rface / Depres	ssions /	38.3439	25 °	38.344189°		
пеш	Rutting			-121.5802	97 °	-121.580231 °		
DWR ID DWR_RD0150_03_s _ 2018_44								
Comment Code								

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	0.92	Rating **	М	Issue No.		5		
LM End	0.92	Issue Type +	Ма	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	Vegetation				38.345493°		
пеш				-121.579682 °		-121.579682°		
DWR ID	DWR_RD0	150_03_s _ 201	2_5					
		Comn	nent Cod	de				
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	ability.		
Inspector Comment								
Maintain vi	Maintain visibility of levee slopes.							

No Photos

LM Start	1.35	Rating **	М	Issue No.		953
LM End	1.35	Issue Type +	En	Location *		
Category	ental	GPS La	titud	le/Longitude		
Calegory		Start		End		
Item	DWR UCIP Field Study			38.3474	89°	38.347489°
пеш				-121.5733	02°	-121.573302°
DWR ID	22433					

# Comment Code

### Inspector Comment

FS\_ID:19112 DS\_ID:22433 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No handrail on wooden walkway.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, invert elevation 8 feet below the crown. Pump in a pump house on the waterside (WS) slope. Service pole and steel distribution box on the landside (LS) slope. (A. Pylman). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March

1957, (HLM 1.39)]. FS Date: 8/20/2013

### Photo 1 of 3: UCIP\_FA\_2018\_19112\_32044.jpg



WS view: pipe on levee slope and pump house in channel.

LS : Land Side N/A : Not Applicable WS : Water Side

### \* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issu Ma

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.35	Rating **	М	Issue No.		953 (cont)
LM End	1.35	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory						End
Item	DWR UCI	P Field Study		38.34748	39°	38.347489°
пеш				-121.57330	)2 °	-121.573302°
DWR ID	22433					·

# Inspector Comment

Comment Code

FS\_ID:19112 DS\_ID:22433 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No handrail on wooden walkway.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, invert elevation 8 feet below the crown. Pump in a pump house on the waterside (WS) slope. Service pole and steel distribution box on the landside (LS) slope. (A. Pylman). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 1.39)].

FS Date: 8/20/2013

LM Start	1.35	Rating **	М	Issue No.	953 (cont)
LM End	1.35	Issue Type +	En	Location *	



WS view: concrete headwall and exposed pipe on levee slope.

### Photo 3 of 3: UCIP\_FA\_2018\_19112\_32042.jpg



WS view: pipe, wooden walkway and pump house in channel.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.42	Rating **	С	Issue No.		70
LM End	1.42	Issue Type +	Ob	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Erosion /	Erosion / Bank Caving			32 °	38.348132
item	1			-121.572368 °		-121.572368
DWR ID	DWR ID DWR_RD0150_03_f _ 2016_70					
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		

No Photos

Issue No. 1.42 Rating \*\* С LM Start 33 1.44 Issue Type + Ма Location \* WS LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.348142° 38.348411 ° Item -121.572319° -121.572339° DWR\_RD0150\_03\_f \_ 2017\_33 DWR ID Comment Code

No Photos

### Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 98 feet long. See attached pages for photos.

Site ID No:293

Site Designation:LMA-119

Repair Type: Erosion

Rating:Critical

Field Date:7/19/2017

Notes: Site is serious because lower 2/3 of slope is near vertical and site is located on a bend. Fall 2018 DWR Inspector: LMA repaired

slope.

# **Levee Inspection Report By Mile - Fall 2018**

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.54	Rating **	С	Issue No.		77
LM End	1.54	Issue Type +	Ma	Location *		CR
Category	Earthen L	evee		GPS La	titud	le/Longitude
Calegory				Start		End
Item	Crown Su	rface / Depres	ssions /	38.3498	08°	38.349808°
пеш	Rutting			-121.5726	41 °	-121.572641 °
DWR ID	DWR ID DWR_RD0150_03_s _ 2018_77					
		Comn	nent Cod	le		
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.		
	Inspector Comment					

No Photos

Rating \*\* Issue No. A/W 1.55 LM Start 34 Issue Type + Location \* LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.349949° Item -121.572659° DWR\_RD0150\_03\_f \_ 2017\_34 DWR ID Comment Code

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:211

Site Designation:386-93 Repair Type: Seepage

Rating: Field Date: Notes:

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

A/W : Acceptable but Monitor & Maintain

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.78	Rating **	М	Issue No. 954		954	
LM End	1.78	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Itom	DWR UC	IP Field Study		38.35318	80°	38.353180°	
пеш	Item			-121.57290	)7°	-121.572907°	
DWR ID	22434						
Comment Code							

### Inspector Comment

FS\_ID:19137 DS\_ID:22434 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Small depression on WS slope due to leak from

pump. Pipe opens on LS ditch/depression.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 3.4 feet below the crown. Pump, gate valve, and service pole on the waterside (WS) slope. (W. Bogle). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 1.82), 7-inch pipe referenced].

FS Date: 8/20/2013

LM Start	1.78	Rating **	М	Issue No.	954 (cont)
LM End	1.78	Issue Type +	En	Location *	



WS view: exposed pipe and power pole on levee slope.

### Photo 2 of 3: UCIP\_FA\_2018\_19137\_32107.jpg



WS view: exposed pipe on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.78	Rating **	М	Issue No.		954 (cont)	
LM End	1.78	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Oly			Start		End	
Item	DWR UCI	DWR UCIP Field Study			0 °	38.353180	0
item				-121.57290	7°	-121.572907	0
DWR ID	22434						

### Inspector Comment

Comment Code

FS\_ID:19137 DS\_ID:22434 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Small depression on WS slope due to leak from

Dating \*\*

pump. Pipe opens on LS ditch/depression.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 3.4 feet below the crown. Pump, gate valve, and service pole on the waterside (WS) slope. (W. Bogle). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 1.82), 7-inch pipe referenced].

FS Date: 8/20/2013

. . . . . .



WS view: pipe and slant pump on levee slope.

LM Start	1.78	Railing	IVI	issue ivo.		ວບ	
LM End	1.78	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Itom	Item			38.3532	49°	38.353249°	
пеш				-121.5728	48 °	-121.572848 °	
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_50						
Comment Code							
ST : Stairway							

Inspector Comment

Photo 1 of 1	: FA_2018_RD0150_17_50_20180910_00039.jpg
- AND	



Steps were dug next to the pipe, and also erosion was found near the vicinity of the pipe on the waterside slope of the levee looking upstream.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR : Crown

Stairs are dug next to the pipe.

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	1.83	Rating **	М	Issue No.		85	
LM End	1.83	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.3537	'61 °	38.353761°	
item	item				90°	-121.572390°	
DWR ID	DWR_RD0	150_03_s _ 201	6_85				
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							



View of broken tree trunk on the waterside slope of the levee.

LM Start	2.29	Rating **	A/W	Issue No.		37
LM End	2.30	Issue Type +	Ma	Location * WS		WS
Category				GPS La	atitud	e/Longitude
Calegory	alegory			Start		End
Item	2017 Stor	m Damage		38.3541	03°	38.354211 °
item				-121.5648	50°	-121.564631 °
DWR ID DWR_RD0150_03_f _ 2017_37						
	Comment Code					

### Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos.

Site ID No:294

Site Designation:LMA-120

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site.

Crown is a paved road.



View of slope damage near fallen tree. Fall 2018

# **Levee Inspection Report By Mile - Fall 2018**

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.29	Rating **	A/W	Issue No.		37 (cont)		
LM End	2.30	Issue Type +	Ma	Location *	Location *			
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Stor	m Damage		38.3541	03 °	38.354211 °		
пеш				-121.5648	50°	-121.564631 °		
DWR ID	DWR ID DWR_RD0150_03_f _ 2017_37							
	Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos. Site ID No:294

Site Designation:LMA-120 Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site. Crown is a paved road.

LM Start	2.29	Rating **	A/W	Issue No.	37 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS



Photo 3 of 4: LEVAL\_FA\_2018\_294\_2275.jpg



\* Location N/A: Not Applicable LS: Land Side WS: Water Side

CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.29	Rating **	A/W	Issue No.		37 (cont)		
LM End	2.30	Issue Type +	Ma	Location *	Location * WS			
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Stor	m Damage		38.35410	)3 °	38.354211°		
пеш				-121.5648	50°	-121.564631 °		
DWR ID	DWR ID DWR_RD0150_03_f _ 2017_37							
	Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description:Instability, cracking, and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 75 feet long. See attached pages for photos. Site ID No:294

Site Designation:LMA-120

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because erosion is not too far into the levee prism and looks similar to the rest of the levee outside of the site. Crown is a paved road.



LM Start	2.31	Rating **	С	Issue No.		78	
LM End	2.31	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	titud	le/Longitude		
Category			Start		End		
Item	Trim / Thi	n Trees		38.35428	36°	38.354286	0
item				-121.56449	94 °	-121.564494	٥
DWR ID DWR_RD0150_03_s _ 2012_78							
Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

### Inspector Comment

New tree was planted on the landside slope. Remove trees smaller than 4-inches in diameter at chest height.

No Photos

WS: Water Side

A: Acceptable Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.51	Rating **	С	Issue No.		38	
LM End	2.52	Issue Type +	Ма	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	2017 Stor	m Damage		38.35623	1 °	38.356422	0
пеш				-121.56191	7°	-121.561783	0
DWR ID	DWR_RD0	150_03_f _ 201	7_38				

No Photos

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:296

Site Designation:LMA-122

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is a paved road. Serious because erosion cuts into levee prism significantly (lower 2/3 - 1/2 is near vertical) and longitudinal cracking observed above erosion, but damage does not extend into crown. Fall 2018 DWR Inspector: LMA repaired erosion and cracking damage to slope.

LM Start	2.52	Rating **	С	Issue No.		54	
LM End	2.52	Issue Type +	Ма	Location *	WS		
Earthen Levee			GPS La	titud	le/Longitude		
Category				Start		End	
Item	Erosion /	Bank Caving		38.3563	98°	38.356398°	
пеш				-121.5618	34°	-121.561834°	
DWR ID DWR_RD0150_03_s _ 2017_54					·		
Comment Code							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

LMA repaired erosion damage.

No Photos

A/W : Acceptable but Monitor & Maintain

# **Levee Inspection Report By Mile - Fall 2018**

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.72	Rating **	A/W	Issue No.		42
LM End	2.73	Issue Type +	Ma	Location *		WS
Category				GPS La	titud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		38.3592	56 °	38.359461 °
пеш				-121.56123	39°	-121.561275 °
DWR ID	R ID DWR_RD0150_03_f _ 2017_42					

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 75 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos

Site ID No:297

Site Designation:LMA-123

Repair Type: Stability Rating:Area of Concern

Field Date:7/18/2017

Notes: Crown is a paved road. 20 ft of cracking observed maximum within the site, but lower 1/4 of slope is near vertical. Lower priority because it is not too much worse than the surounding levees.

LM Start	2.72	Rating **	A/W	Issue No.	42 (cont)
LM End	2.73	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL\_FA\_2018\_297\_1931.jpg



CR : Crown

A: Acceptable

U : Unacceptable

Minimally Acceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.72	Rating **	A/W	Issue No.	42 (cont)		
LM End	2.73	Issue Type +	Ma	Location *	* WS		
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	2017 Stor	m Damage		38.3592	56°	38.359461 °	
пеш				-121.5612	39°	-121.561275 °	
DWR ID	DWR_RD0150_03_f _ 2017_42						
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 75 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos

Site ID No:297

Site Designation:LMA-123

Repair Type: Stability Rating: Area of Concern

Field Date:7/18/2017 Notes: Crown is a paved road. 20 ft of cracking observed maximum within the site, but lower 1/4 of slope is near vertical. Lower priority because it is not too much worse than the surounding levees.

Photo 3 of 3: LEVAL\_FA\_2018\_297\_1933.jpg

LM Start	2.74	Rating **	A/W	Issue No.		45	
LM End	2.76	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		38.35959	4°	38.359808	0
пеш				-121.56130	8°	-121.561369	0
DWR ID	DWR_RD0	150_03_f _ 201	7_45				

# Comment Code

### Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:298

Site Designation:LMA-124

Repair Type: Stability Rating: Area of Concern Field Date:7/18/2017

Notes: No cracking observed, but there is runoff erosion along the entire WS slope here. Crown is a paved road. Area of concern because erosion was caused by runoff and was less severe than other sites along Elk Slough.



Location

LS: Land Side N/A: Not Applicable

WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.74	Rating **	A/W	Issue No.	45 (cont)		
LM End	2.76	Issue Type +	Ма	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Calegory	Salegory					End	
Item	2017 Stor	m Damage		38.35959	94 °	38.359808°	
пеш				-121.56130	)8°	-121.561369°	
DWR ID	DWR ID DWR_RD0150_03_f _ 2017_45						
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:On 11 and 15 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 80 feet long and 5 to 10 feet down from the levee crest. See attached pages for photos.

Site ID No:298

Site Designation:LMA-124

Repair Type: Stability Rating:Area of Concern

Field Date:7/18/2017

Notes: No cracking observed, but there is runoff erosion along the entire WS slope here. Crown is a paved road. Area of concern because erosion was caused by runoff and was less severe than other sites along Elk Slough.

LM Start	2.74	Rating **	A/W	Issue No.	45 (cont)
LM End	2.76	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL\_FA\_2018\_298\_1926.jpg



\* Location

LS : Land Side N/A : Not Applicable WS : Water Side

able

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Mainte
Ob : Design

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

11100	2.75	Rating **	A/W	Issue No.		62		
LM Start	2.75	Rating	A/VV	issue ivo.		02		
LM End	2.75	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Slope Sta	bility		38.3596	93 °	38.359693 °		
пеш				-121.5613	54°	-121.561354°		
DWR ID	DWR_RD0	150_03_s _ 201	7_62					
		Comn	nent Cod	de				
S1 : Repai	r slope ins	tability.						
Inspector Comment								
Run-off due to rain.								
	ran on due to rain.							



View of slope instability on the waterside slope of the levee looking downstream. Spring 2017

LM Start	2.80	Rating **	A/W	Issue No.		53	
LM End	2.81	Issue Type +	Ма	Location *	WS		
Category				GPS La	titud	e/Longitude	
Category	Salegory					End	
Item	2017 Stor	m Damage		38.3603	67°	38.360544°	
пеш				-121.56159	92 °	-121.561683°	
DWR ID	D DWR_RD0150_03_f _ 2017_53						
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 70 feet long and 12 feet down from the levee crest. See attached pages for photos

Site ID No:299

Site Designation:LMA-125 Repair Type: Stability Rating:Area of Concern

Field Date:7/18/2017
Notes: Crown is a paved road. Cracking on upper 1/3 of slope. Lower 1/2 of slope is near vertical. Area of concern because erosion is less severe than other sites along Elk Slough.



LS : Land Side N/A : Not Applicable WS : Water Side

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	A/W	Issue No.		53 (cont)	
LM End	2.81	Issue Type +	Ma	Location *		WS	
Category			GPS La	titud	e/Longitude		
Calegory	Category					End	
Item	2017 Stor	m Damage		38.36036	67°	38.360544	
пеш			-121.5615	92°	-121.561683	٥	
DWR ID	DWR_RD0	150_03_f _ 201	7_53				

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 11 January 2017, waterside instability and cracking were observed on the east (left) bank of Elk Slough. The site is approximately 70 feet long and 12 feet down from the levee crest. See attached pages for photos

Site ID No:299

Site Designation:LMA-125

Repair Type: Stability

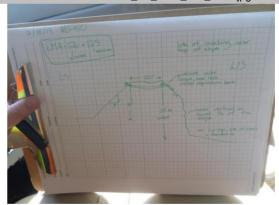
Rating: Area of Concern Field Date:7/18/2017

Notes: Crown is a paved road. Cracking on upper 1/3 of slope. Lower 1/2 of slope is near vertical. Area of concern because erosion is less severe than other sites along Elk Slough.

LM Start	2.80	Rating **	A/W	Issue No.	53 (cont)
LM End	2.81	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL\_FA\_2018\_299\_2108.jpg



A : Acceptable
M : Minimally A Minimally Acceptable U : Unacceptable

A/W : Acceptable but Monitor & Maintain

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency

Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	С	Issue No.		79
LM End	2.80	Issue Type +	Ma	Location *		
Category			GPS Lati	tud	e/Longitude	
Calegory	Category			Start		End
Item	2017 Stor	m Damage		38.36037	2°	38.360397°
пеш			-121.56159	1°	-121.561606°	
DWR ID	DWR_RD0	150_03_f _ 201	7_79			

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 7 February 2017, a sinkhole 3 feet wide by 3 feet deep was observed at the levee crest. See attached pages for photos. Site ID No:300

Site Designation:LMA-126

Repair Type: Stability Rating:Area of Concern Field Date:7/18/2017

section.

Notes: Sinkhole os present on both sides of crown and crown has a dip of about 1 ft on the WS half. Crown is a paved road here. Sink hole appears to be caused by a rodent hole so it was rated lower priority because it is a general maintenance issue. See LMA-125 for cross

No Photos

LM Start	2.80	Rating **	A/W	Issue No.		35
LM End	2.80	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS La	titud	le/Longitude	
Calegory				Start		End
Item	Erosion /	Bank Caving		38.3604	32°	38.360432 °
item				-121.5616	44 °	-121.561644°
DWR ID DWR_RD0150_03_s _ 2013_35						
		Comp	ant Car	lo.		

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment



View of erosion at top of slope. Fall 2018

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.80	Rating **	A/W	Issue No.		35 (cont)		
LM End	2.80	Issue Type +	Ма	Location *	WS			
Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Erosion / Bank Caving			38.3604	32°	38.360432°		
пеш			-121.5616	44°	-121.561644°			
DWR ID DWR_RD0150_03_s _ 2013_35								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.		
Inspector Comment								

Photo 2 of 2: FA\_2018\_RD0150\_17\_35\_20180910\_00018.jpg



View of erosion on the waterside of the levee during spring 2017 inspection.

LM Start	2.81	Rating **	С	Issue No.		71	
LM End	2.81	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Animal Co	ontrol		38.360477°		38.360477°	
пеш				-121.561625 °		-121.561625°	
DWR ID DWR_RD0150_03_s _ 2017_71							
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

2.82	Rating **	М	Issue No.		17				
2.82	Issue Type +	Ма	Location *		WS				
Category Earthen Levee				atitud	le/Longitude				
			Start		End				
Encroachi	ments	38.3606	21 °	38.360621 °					
			-121.5617	62 °	-121.561762°				
DWR ID DWR_RD0150_03_s _ 2012_17									
	Comm	nent Cod	de						
or limb									
	Inspecto	or Comm	nent						
Remove down tree on the waterside toe of the levee.									
	2.82 Earthen L Encroachi DWR_RD0 or limb	2.82 Issue Type + Earthen Levee Encroachments  DWR_RD0150_03_s _ 201 Commor limb Inspector	2.82 Issue Type + Ma Earthen Levee Encroachments  DWR_RD0150_03_s _ 2012_17	2.82         Issue Type +         Ma         Location *           Earthen Levee         GPS La         Start           Encroachments         38.3606         -121.5617           DWR_RD0150_03_s _ 2012_17         Comment Code           or limb         Inspector Comment	2.82   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitud				



View of tree stumps and downed stree on the waterward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	2.95	Rating **	М	Issue No.		86	
LM End	2.95	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.3624	31 °	38.362431 °	
пеш				-121.5622	65 °	-121.562265 °	
DWR ID	DWR_RD0	150_03_s _ 201	8_86				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove downed tree on waterside slope.							
·							



Downed tree waterside looking southwest. Spring 2018

LM Start	3.28	Rating **	М	Issue No.	113	
LM End	3.28	Issue Type +	En	Location *	LS	
Catagory	evee	GPS La	atitud	le/Longitude		
Calegory	Category					End
Item	Encroach	ments		38.362992 ° 38.362992		
item			-121.5572	75°	-121.557275 °	
DWR ID DWR_RD0150_03_f _ 2013_113						
Comment Code						

PO: Pole

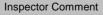
### Inspector Comment

Unused pole on the levee slope does not appear to be permitted by CVFPB and should be removed.



View of unused pole on the levee slope. Fall 2018

LM Start	3.31	Rating **	М	Issue No.		40	
LM End	3.31	Issue Type +	Ob	Location *		WS	
Catagory	Earthen L	evee		GPS La	titud	le/Longitude	
Calegory	Category					End	
Item	Erosion /	Erosion / Bank Caving			08°	38.363008°	
item				-121.5567	51 °	-121.556751 °	
DWR ID	DWR_RD0	150_03_s _ 201	3_40				
Comment Code							
E2 : Schedule repair of erosion site prior to the next inspection.							





View of erosion on the waterside of the levee during spring 2015 inspection.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.31	Rating **	M	Issue No.	40 (cont)		
LM End	3.31	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Erosion / Bank Caving			38.3630	08°	38.363008°	
пеш				-121.5567	'51 °	-121.556751 °	
DWR ID	DWR_RD0	150_03_s _ 201	13_40				
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.	
	Inspector Comment						

Photo 2 of 2 : FA\_2018\_RD0150\_17\_40\_20180910\_00029.jpg

View of erosion on the waterside of the levee looking upstream during fall 2014 inspection.

LM Start	3.34	Rating **	М	Issue No.		27	
LM End	3.34	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroach	ments		38.3631	47°	38.363147°	
item				-121.5561	90°	-121.556190°	
DWR ID	ID DWR_RD0150_03_s _ 2012_27						

Comment Code

TR: Tree or limb

Inspector Comment

Downed tree on the waterside toe of the levee.



View of downed tree on the waterside slope looking upstream.

							_
LM Start	3.36	Rating **	M	Issue No.		102	
LM End	3.36	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion /	Bank Caving		38.3632	54°	38.363254	0
пеш				-121.555889°		-121.555889	0
DWR ID	DWR_RD0	150_03_s _ 201	8_102				
		Comn	nent Cod	de			
E1: Note a	and monito	or erosion site					
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.37	Rating **	A/W	Issue No.	76	
LM End	3.45	Issue Type +	Ма	Location *	WS	
Earthen Levee				GPS La	atitud	le/Longitude
Calegory	Category					End
Item	Riprap Re	vetments		38.3633	80°	38.364325°
item				-121.5557	15 °	-121.555330°
DWR ID	DWR_RD0150_03_s _ 2017_76					
Comment Code						

### Inspector Comment

LMA or the pipe owner has placed new riprap on the waterside slope.



View of the new riprap on the waterside slope of the levee looking downstream. Spring 2017

LM Start	3.39	Rating **	U	Issue No.	955		
LM End	3.39	Issue Type +	En	Location *			
Category	ental	GPS La	atituc	le/Longitude			
Category		Start End					
Item	DWR UC	IP Field Study		38.3635	20°	38.363520°	
пеш				-121.5555	71 °	-121.555571°	
DWR ID	R ID 22439						
Comment Code							

### Inspector Comment

FS\_ID:53334 DS\_ID:22439 EP\_NO: N/A

Repair Type: Urgent Crossing Status: Found

UCIP Comments: 06/05/2018 Same as last inspection; LS erosion looks the same if not slightly worse, so the crossing remains Urgent (DWR UCIP - D. Sanoski)03/30/2017 Riprap laid around pipe on WS slope. Source of erosion has not been addressed, nor has LS toe been repaired. Update and photo courtesty of Pavel Kazi, FPIIB Inspector, as a part of his Sprint 2017 Inspections. (K. Fazel - UCIP) 11/10/2016 Erosion at LS toe has progressed since last inspection and is now severe. Photo courtesy of Pavel Kazi, FPIIB Inspector, as a part of his Fall 2016 Inspections. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)08/20/2013 Leaky concrete standpipe on landside levee toe creating some erosion.- pump was working at the time of inspection. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, invert elevation 3.7 feet below the crown. Service pole on the waterside (WS) slope. Pump on a piling structure in the stream. Concrete standpipe at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 3.45)].

FS Date: 6/5/2018 3:29:00 PM

# Photo 1 of 3: UCIP\_FA\_2018\_53334\_35013.jpg



WS view: exposed pipe, walkway, service pole on levee slope and pump support in channel.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.39	Rating **	U	Issue No.	955 (cont)		
LM End	3.39	Issue Type +	En	Location *			
Catagory	Supplemental				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DWR UC	P Field Study		38.36352	20°	38.363520°	
пеш				-121.5555	71 °	-121.555571 °	
DWR ID	22439					,	

### Inspector Comment

Comment Code

FS\_ID:53334 DS\_ID:22439 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 06/05/2018 Same as last inspection; LS erosion looks the same if not slightly worse, so the crossing remains Urgent (DWR UCIP - D. Sanoski)03/30/2017 Riprap laid around pipe on WS slope. Source of erosion has not been addressed, nor has LS toe been repaired. Update and photo courtesty of Pavel Kazi, FPIIB Inspector, as a part of his Sprint 2017 Inspections. (K. Fazel - UCIP) 11/10/2016 Erosion at LS toe has progressed since last inspection and is now severe. Photo courtesy of Pavel Kazi, FPIIB Inspector, as a part of his Fall 2016 Inspections. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)08/20/2013 Leaky concrete standpipe on landside levee toe creating some erosion.- pump was working at the time of inspection. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, invert elevation 3.7 feet below the crown. Service pole on the waterside (WS) slope. Pump on a piling structure in the stream. Concrete standpipe at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (RM 3.45)].

FS Date: 6/5/2018 3:29:00 PM

LM Start	3.39	Rating **	U	Issue No.	955 (cont)
LM End	3.39	Issue Type +	En	Location *	



WS view: steel pipe & pump, walkway, pump support in the channel.

Photo 3 of 3: UCIP\_FA\_2018\_53334\_35011.jpg



LS view: exposed pipe on levee slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.39	Rating **	U	Issue No.		115			
LM End	3.39	Issue Type +	Ma	Location *		LS			
Earthen Levee				GPS La	tituc	de/Longitude			
Category				Start		End			
Item	Erosion / I	Bank Caving		38.36354	40 °	38.363540°			
пеш				-121.55555	54°	-121.555554°			
DWR ID DWR_RD0150_03_f _ 2013_115									
		Comn	nent Cod	de					
E2 : Sched	dule repair	of erosion site	e prior to	the next ins	spe	ction.			
		Inspecto	or Comm	nent					
Erosion (ditch) was found on the landside toe of the levee.									

LM Start	3.39	Rating **	U	Issue No.	115 (cont)
LM End	3 30	Issue Type +	Ma	Location *	LS

# Photo 1 of 3: FA\_2018\_RD0150\_17\_115\_20180910\_00111.jpg

View of the ditch on the landside toe of the levee. Fall 2016

Photo 2 of 3: FA\_2018\_RD0150\_17\_115\_20180910\_00112.jpg



View of the ditch on the landside toe of the levee during fall 2015 inspection.

LM Start	3.39	Rating **	U	Issue No.	115 (cont)
LM End	3.39	Issue Type +	Ma	Location *	LS

### Photo 3 of 3: FA\_2018\_RD0150\_17\_115\_20180910\_00113.jpg



A drainage ditch with depth of 4 feet and width of 15 feet was found on the landside toe of the levee. The picture was taken from the landside slope looking upstream during the fall 2013 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.44	Rating **	С	Issue No.		47					
LM End	3.48	Issue Type +	En	Location *		LS					
Category	Earthen L	evee		GPS La	atitud	e/Longitude					
Calegory				Start		End					
Item	Vegetatio	n		38.3642	51°	38.364772°					
пеш				-121.5553	21 °	-121.555343 °					
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_47										
		Comn	nent Coc	de							
V6 : Lands	caping										
		Inspecto	or Comm	nent							

No Photos

LM Start	3.45	Rating **	A/W	Issue No.		91	
LM End	3.46	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.3644	50°	38.364567	0
item				-121.5553	31 °	-121.555333	0
DWR ID	DWR_RD0	150_03_f _ 201	7_91				

# Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 11 January 2017 and 7 February 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 43 feet long and 11 feet down from the levee crest. See attached pages for photos.

Site ID No:302

Site Designation:LMA-128 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Erosion on lower 2/3 of slope. Crown is a paved road. Area of concern because erosion was not as severe and there was lots of vegetation on the lower slope indicating damage may be older. WS slope has been rocked just downstream of this site.



LS : Land Side N/A : Not Applicable WS : Water Side

\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.45	Rating **	A/W	Issue No. 91 (con		91 (cont)	
LM End	3.46	Issue Type +	Ma	Location *	WS		
Supplemental				GPS Latitude/Longitude			
Category			Start		End		
ltem 2017 Storm Damage				38.364450 °		38.364567 °	
				-121.555331 °		° -121.555333	
DWR ID	DWR_RD0150_03_f _ 2017_91						
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description:On 11 January 2017 and 7 February 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 43 feet long and 11 feet down from the levee crest. See attached pages for photos.

Site ID No:302

Site Designation:LMA-128

Repair Type: Erosion Rating: Area of Concern Field Date:7/18/2017

Notes: Erosion on lower 2/3 of slope. Crown is a paved road. Area of concern because erosion was not as severe and there was lots of vegetation on the lower slope indicating damage may be older. WS slope has been rocked just downstream of this site.

LM Start	3.45	Rating **	A/W	Issue No.	91 (cont)
LM End	3.46	Issue Type +	Ма	Location *	WS



Photo 3 of 3: LEVAL\_FA\_2018\_302\_2089.jpg



\* Location

N/A: Not Applicable LS: Land Side

WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.66	Rating **	М	Issue No.		956		
LM End	3.66	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCIP Field Study				13 °	38.367213°		
item				-121.5552	73°	-121.555273°		
DWR ID	22440							

### Inspector Comment

Comment Code

FS\_ID:50202 DS\_ID:22440 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/07/2016: Unable to locate evidence of major depression of WS slope. Only slight depression on WS slope above pump. Though this is an up-and-over pipe, no positive closure device found. Inlet in LS standpipe is capped with a board. If no longer in use, needs to be abandoned properly. Siphon breaker/vent on WS needs a cover. Wave-wash run-up along river bank characteristic of much of Elk Slough. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)08/20/2013:Levee damage.Gate valve on WS not found. (P. Amatya - DWR)

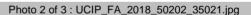
FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 5.9 feet below the crown. Slant pump on the waterside (WS) slope. Vent/siphon breaker at the apex of the pipe on the WS. Concrete platform lies next to the pump on the WS. Concrete standpipe and service pole with meter at the landside (LS) toe. Property owner is Ken Pylman at (916) 775-1066. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 3.73)].

FS Date: 7/7/2016

LM Start	3.66	Rating **	М	Issue No.	956 (cont)
LM End	3.66	Issue Type +	En	Location *	



WS view: steel pipe and pump on levee slope.





WS view: steel pipe with safety valve (marked) on levee slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

LS: Land Side N/A: Not Applicable M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

M: Minimally Acceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.66	Rating **	М	Issue No.		956 (cont)	
LM End	3.66	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
DWR UCIP Field Study				38.3672	ı3°	38.367213 °	
пеш				-121.55527	73 °	-121.555273 °	
DWR ID	22440					·	

### Inspector Comment

Comment Code

FS\_ID:50202 DS\_ID:22440 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/07/2016: Unable to locate evidence of major depression of WS slope. Only slight depression on WS slope above pump. Though this is an up-and-over pipe, no positive closure device found. Inlet in LS standpipe is capped with a board. If no longer in use, needs to be abandoned properly. Siphon breaker/vent on WS needs a cover. Wave-wash run-up along river bank characteristic of much of Elk Slough. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)08/20/2013:Levee damage.Gate valve on WS not found. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 5.9 feet below the crown. Slant pump on the waterside (WS) slope. Vent/siphon breaker at the apex of the pipe on the WS. Concrete platform lies next to the pump on the WS. Concrete standpipe and service pole with meter at the landside (LS) toe. Property owner is Ken Pylman at (916) 775-1066. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 3.73)].

FS Date: 7/7/2016

# Photo 3 of 3: UCIP\_FA\_2018\_50202\_35017.jpg



WS view: soil erosion (depression) on levee slope.

LM Start	3.79	Rating **	М	Issue No.		116		
LM End	3.79	Issue Type +	Ob	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Slope Stability				38.367535°		38.367535°		
ILEIII	Item				5°	-121.552815 °		
DWR ID	DWR_RD0	150_03_f _ 201	3_116					
Comment Code								

S1 : Repair slope instability.

Inspector Comment

# Photo 1 of 1: FA\_2018\_RD0150\_17\_116\_20180910\_00114.jpg



View of slope instability on the waterside of the levee. Fall 2016

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	3.93	Rating **	С	Issue No.	106		
LM End	3.94	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee	GPS Lat	itud	e/Longitude		
Calegory	огу		Start		End		
Item	Vegetatio	n		38.36887	4°	38.369025 °	
пеш					9°	-121.551401 °	
DWR ID DWR_RD0150_03_s _ 2018_106							
	Comment Code						

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	4.02	Rating **	М	Issue No.		93
LM End	4.02	Issue Type +	Ма	Location *	ation * WS	
Category	Earthen L	GPS La	atitud	e/Longitude		
Calegory				Start		End
Item	Erosion /	Bank Caving		38.3701	25°	38.370125°
item				-121.5520	30°	-121.552030 °
DWR ID	DWR_RD0	150_03_s _ 201	6_93			

#### Comment Code

E1: Note and monitor erosion site.

#### Inspector Comment

Erosion on the waterside toe of the levee.

#### Photo 1 of 1 : FA\_2018\_RD0150\_17\_93\_20180910\_00090.jpg



Erosion was found on the waterside toe of the levee. Spring 2016

Photo 1 of 1: FA\_2018\_RD0150\_17\_126\_20180910\_00130.jpg

	LM Start	4.36	Rating **	A/W	Issue No.		126	
	LM End	4.36	Issue Type +	Ma	Location *		WS	
	Catagory	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End			
	Item	Encroachments		38.3741	91°	38.374191	0	
	пеш				-121.5498	18°	-121.549818	0
	DWR ID	DWR_RD0	150_03_f _ 201	7_126				
			Comn	nent Cod	de			

TR: Tree or limb

#### Inspector Comment

A tree fell on the channel, and tree root might erode the waterside toe of the levee.



View of a fallen tree on the waterside toe of the levee. Fall 2017

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

	4.00	Poting **	N 4	Issue No.		F4		
LM Start	4.38	Rating **	М	issue ivo.		51		
LM End	4.38	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitude	e/Longitude		
Odicgory				Start		End		
Item	Encroach	ments		38.3742	69°	38.374269°		
пеш				-121.5493	85°	-121.549385 °		
DWR ID	DWR_RD0	150_03_s _ 201	2_51					
		Comn	nent Cod	de				
DE : Debri	s							
		Inspecto	or Comm	nent				



View of the pruning pile on the landside of the levee looking upstream during the fall 2013 inspection.

LM Start	4.39	Rating **	A/W	Issue No.	98		
LM End	4.43	Issue Type +	Ма	Location *	WS		
Category				GPS Latitude/Longitude			
Category						End	
Item	2017 Stor	m Damage		38.37427	78°	38.374278 °	
пеш				-121.54916	67°	-121.548511 °	
DWR ID DWR_RD0150_03_f _ 2017_98							
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:Between 11 and 19 January 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long, 7 feet below the levee crest, and includes a fallen tree and exposed root ball in the levee slope. See attached pages for photos.

Site ID No:304

Site Designation:LMA-130 Repair Type: Erosion

Rating:Serious Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical on lower 1/2 of slope oncluding a fallen tree with exposed root ball. Serious because sloughing cuts into already oversteepened prism significantly and visible longitudinal cracking near crown.



CR : Crown

LS : Land Side N/A : Not Applicable WS : Water Side

\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.39	Rating **	A/W	Issue No.	lo. 98 (cont)		
LM End	4.43	Issue Type +	Ma	Location *		WS	
Category	Supplemental				atitud	le/Longitude	
Calegory	ory			Start		End	
Item	2017 Stor	m Damage		38.3742	78°	38.374278°	
пеш				-121.5491	67°	-121.548511 °	
DWR ID	R ID DWR_RD0150_03_f _ 2017_98						
	Comment Code						

# Inspector Comment

Levee Evaluation Comments

Description:Between 11 and 19 January 2017, waterside instability and erosion were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long, 7 feet below the levee crest, and includes a fallen tree and exposed root ball in the levee slope. See attached pages for photos.

Site ID No:304

Site Designation:LMA-130 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical on lower 1/2 of slope oncluding a fallen tree with exposed root ball. Serious because sloughing cuts into already oversteepened prism significantly and visible longitudinal cracking near crown.

LM Start	4.39	Rating **	A/W	Issue No.	98 (cont)
LM End	4.43	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL\_FA\_2018\_304\_2078.jpg



Location

N/A: Not Applicable LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.47	Rating **	A/W	Issue No.		108		
LM End	4.49	Issue Type +	Ma	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory	legory					End		
Item	2017 Stor	m Damage		38.3743	14°	38.374344°		
пеш				-121.5477	53°	-121.547447°		
DWR ID DWR_RD0150_03_f _ 2017_108								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Between 11 January 2017 and 7 February 2017, instability, cracking, and erosion of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 88 feet long. See attached pages for photos.

Site ID No:305

Site Designation:LMA-131

Repair Type: Erosion

Rating:Serious

Field Date:7/18/2017

Notes: Crown is a paved road. Near vertical sloughing on the lower 2/3 of the prisim. House and ramp/driveway on the LS. Serious because sloughing cuts into already oversteepened prism significantly.

LM Start	4.47	Rating **	A/W	Issue No.	108 (cont)
LM End	4.49	Issue Type +	Ма	Location *	WS



Photo 2 of 2: LEVAL\_FA\_2018\_305\_2067.jpg



N/A: Not Applicable LS: Land Side

WS: Water Side CR : Crown

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.49	Rating **	A/W	Issue No.		80		
LM End	4.49	Issue Type +	Ob	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		38.3743	55 °	38.374355		
iteiii				-121.5474	36°	-121.547436		
DWR ID DWR_RD0150_03_s _ 2014_80								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.		
		Inspecto	or Comm	nent				



View of an erosion site on the waterside toe of the levee looking upstream. Spring 2014

LM Start	4.49	Rating **	М	Issue No.		94				
LM End	4.49	Issue Type +	En	Location *		LS				
Earthen Levee				GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Vegetatio	n		38.3743	67°	38.374367 °				
item				-121.5473	27°	-121.547327 °				
DWR ID DWR_RD0150_03_s _ 2012_94										
		Comn	nent Cod	de						
V6 : Lands	scaping									
		Inspecto	or Comm	nent						



View of landscape on the landside shoulder of the levee. Fall 2016

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.63	Rating **	М	Issue No.		957	
LM End	4.63	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitu		ude/Longitude	
Category				Start		End	
Item	DWR UCI	P Field Study		38.37493	4°	38.374934	0
пеш				-121.54502	9°	-121.545029	0
DWR ID	22444						

#### Inspector Comment

Comment Code

FS\_ID:19281 DS\_ID:22444 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on LS. 1" conduit on WS.- levee toe

cut out on landside.- walkway and gate.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 3.8 feet below the crown. Pump on pilings in the stream. Concrete standpipe at the landside (LS) toe. (P. Cook). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 112, March 1957, (HLM 4.71)].

FS Date: 8/20/2013

LM Start	4.63	Rating **	М	Issue No.	957 (cont)
LM End	4.63	Issue Type +	En	Location *	



Photo 1 of 3: UCIP\_FA\_2018\_19281\_32541.jpg



WS view: vertical pump on deck.

Photo 2 of 3: UCIP\_FA\_2018\_19281\_32540.jpg



WS view: 1-inch GI conduit (left) and steel pipe (right)

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.63	Rating **	М	Issue No.	957 (cont)			
LM End	4.63	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Category						End		
Item	DWR UC	P Field Study		38.37493	4 °	38.374934°		
пеш				-121.54502	9°	-121.545029°		
DWR ID	22444							
	Comment Code							

# Inspector Comment

FS\_ID:19281 DS\_ID:22444 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on LS. 1" conduit on WS.- levee toe

cut out on landside.- walkway and gate.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 3.8 feet below the crown. Pump on pilings in the stream. Concrete standpipe at the landside (LS) toe. (P. Cook). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 112, March 1957, (HLM 4.71)].

FS Date: 8/20/2013



WS view: safety valve on steel pipe.

4.79	Rating **	М	Issue No.		101	
4.79	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude		
Category					End	
Erosion / Bank Caving			38.3765	62°	38.376562 °	
			-121.5430	16°	-121.543016 °	
DWR ID DWR_RD0150_03_s _ 2017_101						
Comment Code						
	4.79 Earthen L Erosion /	4.79 Issue Type + Earthen Levee Erosion / Bank Caving DWR_RD0150_03_s _ 201	4.79 Issue Type + Ma Earthen Levee Erosion / Bank Caving  DWR_RD0150_03_s _ 2017_101	4.79 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Erosion / Bank Caving 38.3765  -121.5430  DWR_RD0150_03_s _ 2017_101	### A.79   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitude	

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

# Photo 1 of 1 : FA\_2018\_RD0150\_17\_101\_20180910\_00098.jpg

View of an erosion on the waterside toe of the levee. Spring 2017

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
N: Not Inspected/Rated
C: Corrected
M: Minimally Acceptable
C: Corrected
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.90	Rating **	М	Issue No.		958
LM End	4.90	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI		38.3777	18°	38.377718°	
пеш				-121.5414	13°	-121.541413°
DWR ID	22445					·

# Inspector Comment

Comment Code

FS\_ID:19283 DS\_ID:22445 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - seems abandoned.- may need proper

abandonment

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 7.2 feet below the crown. Gate valve on the landside (LS) end. (D. Conner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (HLM 4.99)].

FS Date: 8/23/2013

LM Start	4.90	Rating **	М	Issue No.	958 (cont)
LM End	4.90	Issue Type +	En	Location *	



WS view: steel pipe on levee slope and in the stream.

# Photo 2 of 3: UCIP\_FA\_2018\_19283\_32564.jpg



LS view: abandoned pump set and concrete box on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	4.90	Rating **	M	Issue No.		958 (cont)
LM End	4.90	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory		Start		End		
Item	DWR UCI	38.3777	18°	38.377718		
пеш			-121.5414	13°	-121.541413	
DWR ID	22445					

# Inspector Comment

Comment Code

FS\_ID:19283 DS\_ID:22445 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - seems abandoned.- may need proper

abandonment

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 7.2 feet below the crown. Gate valve on the landside (LS) end. (D. Conner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 112, March 1957, (HLM 4.99)].

FS Date: 8/23/2013



LS view: abandoned pump and gate valve on levee slope.

LM Start	4.91	Rating ""	C	issue ivo.		9		
LM End	4.91	Issue Type +	En	Location *		LS		
Category	GPS Latitude/Longitude							
Calegory		Start		End				
Encroachments ltem				38.3777	61 °	38.377761	0	
item				-121.5413	19°	-121.541319	0	
DWR ID DWR_RD0150_03_s _ 2012_9								
Comment Code								

PR : Prunings

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

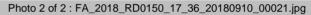
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

111000	4.99	Rating **	М	Issue No.		36	
LM Start	4.99					36	
LM End	4.99	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Slope Sta	bility		38.3787	71°	38.378771 °	
item	item			-121.540538°		-121.540538°	
DWR ID	DWR ID DWR_RD0150_03_f _ 2012_36						
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			

Photo 1 of 2 : FA_2018_		_17_36	_20180910_	_00020.jpg	j
		-		-	
	a sunda		The same		
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				100	
			11/17/	2015	
			STATE OF THE PARTY		

View of slope instability on the waterside shoulder of the levee during fall 2015 inspection.

LM Start	4.99	Rating **	М	Issue No.	36 (cont)
LM End	4.99	Issue Type +	Ma	Location *	WS





Slope instability was found on the waterside of the levee looking upstream.

LM Start	5.00	Rating **	М	Issue No.		124			
LM End	5.00	Issue Type +	Ма	Location *		WS			
Category Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Encroachi	ments		38.3788	88°	38.378888 °			
пеш	item				-86°	-121.540486 °			
DWR ID	DWR_RD0	150_03_s _ 201	8_124						
		Comn	nent Cod	de					
DE : Debri	s								
	Inspector Comment								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

		II.					
LM Start	5.05	Rating **	М	Issue No.	81		
LM End	5.05	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Category				Start		End	
Item	Erosion /	Bank Caving		38.3796	808°	38.379608°	
пеш			-121.540082°		-121.540082°		
DWR ID	DWR_RD0	150_03_f _ 201	4_81				
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion sit	e prior to	the next in	spec	ction.	
Inspector Comment							



View of erosion on the waterside of the levee looking downstream. Fall 2014

LM Start	5.05	Rating **	М	Issue No.		95	
LM End	5.05	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Odlogory				Start		End	
Item	Encroachi	ments		38.3796	17°	38.379617°	
item	-121.540058 ° -121.540058						
DWR ID	DWR_RD0	150_03_s _ 201	6_95				
		Comn	nent Cod	de			
PI : Pipe							
Inspector Comment							
Abandoned pipe was found on the landside slope of the levee.							



View of an abandoned pipe on the landside slope of the levee. Spring 2016

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.06	Rating **	A/W	Issue No.		959
LM End	5.06	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	38.37969	97 °	38.379697°
пеш				-121.54007	70°	-121.540070°
DWR ID	22446					·

# Comment Code

#### Inspector Comment

FS\_ID:49386 DS\_ID:22446 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2014 Recordation from permit files 13736 match

photos and approximate location of UCIP confirmed crossing 8/2013- a smaller pump on WS steel deck and was

running.- seems 30-inch steel pipe goes through the levee.- GI electric conduit on WS and power pole on LS.

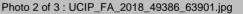
FIELD\_STRUCT\_DESC: 24-inch steel drainage discharge pipe through the levee, 10.5 feet below the crown. Flap gate on the waterside (WS) end. Pump and gate valve at the landside (LS) toe. (Plans to install a 24-inch discharge pipeline through the levee authorized under Permit No. 13736, 1983 - Reclamation District No. 150 [RD0150]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.15), 30-inch pipe referenced, invert elevation 14.5 feet below the crown].

FS Date: 8/23/2013

LM Start	5.06	Rating **	A/W	Issue No.	959 (cont)
LM End	5.06	Issue Type +	Ma	Location *	



WS view: pipe, steel deck, pressure tank, electric control box on stream





WS view: a smaller pump on steel deck. It was working during the survey.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.06	Rating **	A/W	Issue No.		959 (cont)
LM End	5.06	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	38.37969	7°	38.379697 °
пеш				-121.54007	0°	-121.540070 °
DWR ID	22446					

# Comment Code Inspector Comment

FS\_ID:49386 DS\_ID:22446 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2014 Recordation from permit files 13736 match

photos and approximate location of UCIP confirmed

Rating \*\*

crossing.8/2013- a smaller pump on WS steel deck and was running.- seems 30-inch steel pipe goes through the levee.- GI

electric conduit on WS and power pole on LS.

FIELD\_STRUCT\_DESC: 24-inch steel drainage discharge pipe through the levee, 10.5 feet below the crown. Flap gate on the waterside (WS) end. Pump and gate valve at the landside (LS) toe. (Plans to install a 24-inch discharge pipeline through the levee authorized under Permit No. 13736, 1983 - Reclamation District No. 150 [RD0150]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.15), 30-inch pipe referenced, invert elevation 14.5 feet below the crown].

FS Date: 8/23/2013

Unpermitted stairway.

5.09

I M Start



WS view: siphon breaker on pipe in steel deck on stream bank.

LIVI Start	0.00					40		
LM End	5.09	Issue Type +	En	Location *		WS		
Category	Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.3801	10°	38.380110°		
Item				-121.5400	61°	-121.540061 °		
DWR ID	DWR_RD0	150_03_f _ 201	5_48					
		Comn	nent Cod	de				
ST : Stairv	ST : Stairway							
	Inspector Comment							

Issue No.

48

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Photo 1 of 1: FA\_2018\_RD0150\_17\_48\_20180910\_00037.jpg

View of a stairway on the waterside of the levee. Fall 2015

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.14	Rating **	М	Issue No.		941		
LM End	5.14	Issue Type +	Ма	Location *		Location *		CR
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item		rface / Depres	ssions /	38.38077	9°	38.380779°		
пеш	Rutting			-121.54026	4 °	-121.540264 °		
DWR ID	DWR_RD0	150_03_s _ 201	2_941			·		

Comment Code C2: Repair depressions or ruts in the crown or slope.

#### Inspector Comment

There is a significant difference in the crown roadway elevation as it transitions from the paved roadway to the gravel access road.

# Photo 1 of 1: FA\_2018\_RD0150\_17\_941\_20180910\_00139.jpg



View of varying elevations in the crown of the levee at the transition from county road to access road.

LM Start	5.15	Rating **	A/W	Issue No.		111		
LM End	5.15	Issue Type +	Ma	Location *	WS			
Category			GPS Latitude/Longitude					
Category	alegory			Start		End		
Item	2017 Stor	m Damage	38.3809	06°	38.380928°			
пеш			· ·			-121.540364°		
DWR ID DWR_RD0150_03_f _ 2017_111								
	Comment Code							

# Inspector Comment

Levee Evaluation Comments

Description:On 19 January 2017, two large trees were observed to have fallen into the water exposing the root ball on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:309

Site Designation:LMA-135 Repair Type: Erosion Rating: Area of Concern Field Date:7/18/2017

Notes: 2 oak trees fell over at the WS toe and took root balls out of the lower slope about 5 ft deep just above the water line. Area of concern because damage is only on the lower slope near the water line.



CR : Crown

N/A: Not Applicable LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.15	Rating **	A/W	Issue No.	111 (cont)		
LM End	5.15	Issue Type +	Ma	Location *	WS		
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	2017 Stor	m Damage		38.3809	06°	38.380928°	
пеш			· ·			-121.540364°	
DWR ID DWR_RD0150_03_f _ 2017_111							
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:On 19 January 2017, two large trees were observed to have fallen into the water exposing the root ball on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:309

Site Designation:LMA-135

Repair Type: Erosion

Rating: Area of Concern Field Date:7/18/2017

Notes: 2 oak trees fell over at the WS toe and took root balls out of the lower slope about 5 ft deep just above the water line. Area of concern because damage is only on the lower slope near the water line.

LM Start	5.15	Rating **	A/W	Issue No.	111 (cont)
LM End	5.15	Issue Type +	Ma	Location *	WS







CR : Crown

N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.15	Rating **	A/W	Issue No.		72	
LM End	5.15	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory						End	
Item	Encroach	ments	38.3809	40°	38.380940°		
пеш				-121.5403	84°	-121.540384°	
DWR ID	DWR_RD0	150_03_f _ 201	6_72				
Comment Code							
TR : Tree or limb							

Inspector Comment

Tree stump and broken tree were found on the waterside toe.



View of tree stump and broken tree on the waterside toe of the levee. Fall 2016

LM Start	5.19	Rating **	М	Issue No.		125	
LM End	5.19	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	Encroach	ments		38.3813	52°	38.381352°	
пеш			-121.5407	97°	-121.540797°		
DWR ID DWR_RD0150_03_s _ 2018_125							
	Comment Code						

TR : Tree or limb

Inspector Comment

No Photos

LM Start	5.32	Rating **	М	Issue No.		96		
LM End	5.32	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachi	ments		38.3818	43°	38.381843 °		
Item				-121.543117°		-121.543117°		
DWR ID	DWR_RD0	150_03_s _ 201	6_96					
		Comn	nent Cod	de				
TR : Tree	or limb							
Inspector Comment								
Broken tree/root damaged levee slope and needs to be removed.								



Broken tree roots and tree trunks were found on the waterside toe of the levee. Spring 2016

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.40	Rating **	A/W	Issue No.		114
LM End	5.41	Issue Type +	Ма	Location *		WS
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		38.3821	69°	38.382206°
пеш				-121.5445	97°	-121.544731 °
DWR ID DWR_RD0150_03_f _ 2017_114						
Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description: Cracking and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:310

Site Designation:LMA-136 Repair Type: Erosion Rating:Serious Field Date:7/17/2017

Notes: Large oak tree fell over here and took a root ball with it. At least 15 ft wide by 5ft deep soil missing, 5 ft from crown. Longitudinal cracks for 40 ft along crown hinge. Serious because prism is impacted and cracking is visible beyond the damaged area.

LM Start	5.40	Rating **	A/W	Issue No.	114 (cont)
LM End	5.41	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL\_FA\_2018\_310\_2190.jpg



\* Location

CR : Crown

N/A: Not Applicable LS: Land Side WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.40	Rating **	A/W	Issue No.		114 (cont)		
LM End	5.41	Issue Type +	Ма	Location *		WS		
Category				GPS Latitude/Longitude				
Category			Start		End			
Itom	2017 Stor	m Damage		38.38216	69°	38.382206°		
пеш	ltem			-121.54459	97°	-121.544731 °		
DWR ID DWR_RD0150_03_f _ 2017_114								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Cracking and erosion were observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:310

Site Designation:LMA-136

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Large oak tree fell over here and took a root ball with it. At least 15 ft wide by 5ft deep soil missing, 5 ft from crown. Longitudinal cracks for 40 ft along crown hinge. Serious because prism is impacted and cracking is visible beyond the damaged area.



LM Start	5.49	Rating **	N	Issue No.		74		
LM End	5.49	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Trim / Thi	n Trees		38.3830	51 °	38.383051 °		
iteiii			-121.54573	35 °	-121.545735 °			
DWR ID	DWR_RD0	150_03_f _ 201	6_74					

#### Comment Code

T5: Tree stumps.

#### Inspector Comment

Tree stump and broken tree on the waterside shoulder of the levee need to be removed.

#### Photo 1 of 1: FA\_2018\_RD0150\_17\_74\_20180910\_00066.jpg



View of tree trunks on the waterside shoulder of the levee. Fall 2016

\* Location

LS : Land Side N/A : Not Applicable

WS : Water Side CR : Crown

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.50	Rating **	М	Issue No.		12		
LM End	5.50	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachments					38.383099°		
пеш				-121.5457	'44 °	-121.545744°		
DWR ID DWR_RD0150_03_s _ 2012_12								
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				

LM Start	5.50	Rating **	М	Issue No.	12 (cont)
LM End	5.50	Issue Type +	En	Location *	LS

# Photo 1 of 2 : FA\_2018\_RD0150\_17\_12\_20180910\_00002.jpg

Prunings were found on the landside toe of the levee looking upstream.

Photo 2 of 2: FA\_2018\_RD0150\_17\_12\_20180910\_00003.jpg



View of pruning pile on the landside toe of the levee looking upstream during the fall 2013 inspection.

LM Start	5.50	Rating **	М	Issue No.		39		
LM End	5.50	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroachi	38.3831	83°	38.383183°				
item				-121.5457	32°	-121.545732°		
DWR ID DWR_RD0150_03_f _ 2018_39								
		Comn	nent Cod	de				
DE : Debri	s							
			_					
		Inspecto	or Comm	nent				
Landowner needs to remove metal debris from levee slope.								



View of landowner's metal debris at levee toe. Fall 2018

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.56	Rating **	N	Issue No.		68		
LM End	5.56	Issue Type +	Ma	Location *		WS		
Earthen Levee				GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	38.3836	97°	38.383697°				
пеш	iem				01°	-121.545201°		
DWR ID DWR_RD0150_03_s _ 2012_68								
		Comn	nent Cod	de				
T5 : Tree s	stumps.							
		Inspecto	or Comm	nent				



Tree stump was found on the waterside of the levee looking upstream. Fall 2011

LM Start	5.69	Rating **	С	Issue No.		41			
LM End	5.69	Issue Type +	Ма	Location *	WS				
Category Earthen Levee			GPS La	atitud	e/Longitude				
Odlogory				Start		End			
Item	n Trees		38.3839	69°	38.383969°				
itom				-121.5428	06°	-121.542806 °			
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_41								
		Comn	nent Cod	de					
T5 : Tree s	stumps.								
		Inspecto	or Comm	nent					

No Photos

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.70	Rating **	М	Issue No.		960
LM End	5.70	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		38.38399	6°	38.383996 °
пеш				-121.54263	8 °	-121.542638 °
DWR ID	22448					

Inspector Comment

Comment Code

FS\_ID:28265 DS\_ID:22448 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - levee toe cut out at open end of the pipe.- service

pole and control box on river bank.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 7.8 feet below the crown. Pump and gate valve on a steel platform on the waterside (WS). (Plans for the installation of a vertical unit irrigation pumping plant and a 10-inch, 10-gauge steel discharge pipe through the levee authorized under Permit No. 1167, 1947 - Darrell Connor). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.80)].

FS Date: 8/23/2013

LM Start	5.70	Rating **	М	Issue No.	960 (cont)
LM End	5.70	Issue Type +	En	Location *	



WS view: walkway, pipe, pump and support deck on river bank.

Photo 2 of 3: UCIP\_FA\_2018\_28265\_51973.jpg



WS view: electric control box and power pole.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.70	Rating **	М	Issue No.		960 (cont)
LM End	5.70	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.38399	6°	38.383996°
пеш				-121.54263	8 °	-121.542638 °
DWR ID	22448					

#### Inspector Comment

Comment Code

FS\_ID:28265 DS\_ID:22448 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - levee toe cut out at open end of the pipe.- service

pole and control box on river bank.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, invert elevation 7.8 feet below the crown. Pump and gate valve on a steel platform on the waterside (WS). (Plans for the installation of a vertical unit irrigation pumping plant and a 10-inch, 10-gauge steel discharge pipe through the levee authorized under Permit No. 1167, 1947 - Darrell Connor). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 5.80)].

FS Date: 8/23/2013



WS view: pipe. pump and gate valve on pump deck.

LM Start	5.71	Rating **	U	Issue No.	104		
LM End	5.71	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Animal Co	ontrol		38.3840	26°	38.384026°	
item				-121.5424	55 °	-121.542455°	
DWR ID DWR_RD0150_03_s _ 2017_104							
		0		I.			

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Animal hole appears to be inactive but should be backfilled.



View of animal hole on landside toe. Fall 2018

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.71	Rating **	U	Issue No.		104 (cont)	
LM End	5.71	Issue Type +	Ma	Location *		LS	
Cotogon Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
ltom	Item Animal Control			38.3840	26°	38.384026°	
пеш				-121.5424	55 °	-121.542455°	
DWR ID	DWR_RD0	150_03_s _ 201	7_104			·	

#### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Animal hole appears to be inactive but should be backfilled.

Photo 2 of 2: FA\_2018\_RD0150\_17\_104\_20180910\_00099.jpg



View of a rodent hole on the landside toe of the levee. Spring 2017

LM Start	5.73	Rating **	С	Issue No.		127
LM End	5.73	Issue Type +	Ма	Location *		LS
Catagory Earthen Levee				GPS Latitude/Longitude		
Category				Start		End
Item	Animal Control			38.3840	61 °	38.384061 °
пеш				-121.5421	69°	-121.542169°
DWR ID	DWR_RD0	150_03_f _ 201	7_127			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

	LM Start	5.78	Rating **	М	Issue No.		28	
	LM End	5.78	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude				
	Calegory				Start		End	
	Item	Vegetatio	n		38.3843	33°	38.384333	0
пеш			-121.5413	10°	-121.541310	0		
	DWR ID	DWR RD0	150 03 s 201	2 28				

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Wild growth was found on the waterside slope of the levee looking upstream.

Location

N/A: Not Applicable LS: Land Side

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.79	Rating **	М	Issue No.		56
LM End	5.83	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS La	atitud	e/Longitude	
			Start		End	
Item	Encroachments			38.384363°		38.384796°
item			-121.541161 °		-121.540525°	
DWR ID	DWR_RD0	150_03_s _ 201	2_56			
		Comn	nent Cod	de		
FE : Fence	)					
Inspector Comment						



View of fence around a horse pen along the shoulder of the levee and the landward slope.

LM Start	5.82	Rating **	M	Issue No.		57	
LM End	5.82	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Encroachments			38.384648 °		38.384648°	
item				-121.540669 °		° -121.540669°	
DWR ID	DWR_RD0	150_03_s _ 201	2_57				
Comment Code							
TR : Tree or limb							

#### Inspector Comment

# Photo 1 of 1: FA\_2018\_RD0150\_17\_57\_20180910\_00048.jpg



View of a tree trunk lying on the landward slope blocking visibility.

LM Start	5.83	Rating **	U	Issue No.		58	
LM End	5.83	Issue Type +	En	Location *	CR		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Encroach	ments		38.3848	03°	38.384803°	
item				-121.5405	45 °	-121.540545°	
DWR ID	DWR_RD0	2_58					
	Comment Code						

BU: Building

# Inspector Comment

Permit 7517 approved house and graze cattle; 7517-A approved septic tank and 4-inch sewer line.



Building & associated landscaping on levee crown.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	U · Unacceptable	A/W · Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.91	Rating **	U	Issue No.		21	
LM End	5.98	Issue Type +	En	Location *		LS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.3857	'52 °	38.386703°	
item				-121.539905°		-121.540042°	
DWR ID	DWR_RD0150_03_s _ 2012_21						
		Comn	nent Cod	de			
V6 : Lands	scaping						
		Inspecto	or Comm	nent			



Landscaping was found on the landside of the levee looking upstream. Fall 2011

LM Start	5.95	Rating **	М	Issue No. 961		
LM End	5.95	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UC	P Field Study		38.3864	)2 °	38.386402°
пеш				-121.53983	34 °	-121.539834°
DWR ID	22451					
Comment Code						

#### Inspector Comment

FS\_ID:19403 DS\_ID:22451 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pipe ends open on both sides of the levee.abandoned concrete box on WS.- two abandoned steel pipes (6" and
1") also found on WS. - needs proper abandonment
FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation
discharge pipe through the levee, invert elevation 2.5 feet below the
crown. Pump and gate valve removed prior to October 1962. Steel plate
welded to the waterside (WS) end. Power pole and two anchors on the
landside (LS) slope. (Warren Bogle). [Additional Reference(s): DWR
Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957,
(HLM 6.06)].

FS Date: 8/23/2013

# Photo 1 of 3 : UCIP\_FA\_2018\_19403\_32942.jpg

WS view: open ended 6" steel pipe (top-left), 1" steel pipe (bottom), and another 6" steel pipe (right) on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	5.95	Rating **	М	Issue No.		961 (cont)
LM End	5.95	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UC	DWR UCIP Field Study			2°	38.386402°
пеш				-121.53983	4 °	-121.539834°
DWR ID	22451					
Comment Code						

# Inspector Comment

FS\_ID:19403 DS\_ID:22451 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pipe ends open on both sides of the levee.abandoned concrete box on WS.- two abandoned steel pipes (6" and 1") also found on WS. - needs proper abandonment

FIÉLD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, invert elevation 2.5 feet below the crown. Pump and gate valve removed prior to October 1962. Steel plate welded to the waterside (WS) end. Power pole and two anchors on the landside (LS) slope. (Warren Bogle). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 6.06)].

FS Date: 8/23/2013

LM Start	5.95	Rating **	М	Issue No.	961 (cont)
LM End	5.95	Issue Type +	En	Location *	



WS view: Abandoned concrete box (top). Open ended 6" steel pipe, 1" steel pipe, and another 6" steel pipe on levee slope.

Photo 3 of 3: UCIP\_FA\_2018\_19403\_32943.jpg



LS view: open end steel pipe on levee toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.13	Rating **	U	Issue No.		24	
LM End	6.20	Issue Type +	En	Location * LS			
Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Vegetation			38.3885	35°	38.389391 °		
пеш				-121.541657°		-121.541901 <sup>°</sup>	
DWR ID	DWR_RD0150_03_s _ 2012_24						
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			



Oleander on landward slope blocking view of levee.

LM Start	6.23	Rating **	N	Issue No.		49	
LM End	6.23	Issue Type +	Ma	Location *	WS		
Catagory	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Trim / Thin Trees			38.389658 °		38.389658 °		
пеш				-121.5415	18°	-121.541518°	
DWR ID	ID DWR_RD0150_03_s _ 2012_49					·	
		Comn	nent Cod	de			

T5: Tree stumps.

V6: Landscaping

# Inspector Comment





View of tree stumps on the waterward slope.

LM Start	6.23	Rating **	M	Issue No.		25	
LM End	6.25	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetation			38.3897	00°	38.389808	0
Item				-121.5414	62°	-121.541285	0
DWR ID	DWR_RD0	150_03_s _ 201					
Comment Code							

Inspector Comment

No Photos

* Location		** Rating		+ Issue Type
LS : Land Side N/A : I	Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.25	Rating **	М	Issue No.		99		
LM End	6.25	Issue Type +	En	Location *		LS		
Category	evee	GPS Latitude/Longitude						
Calegory	Category					End		
Item	Encroach	ments		38.389857°		38.389857°		
пеш				-121.5411	93 °	-121.541193°		
DWR ID DWR_RD0150_03_s _ 2016_99								
	Comment Code							

TR: Tree or limb

#### Inspector Comment

Landowner trees on the landside slope of the levee are unpermitted and need to be removed.



View of planted trees on the landside slope of the levee. Spring 2016

LM Start	6.25	Rating **	U	Issue No.		26		
LM End	6.29	Issue Type +	En	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Category				Start		End		
Item	Vegetatio	n		38.389858 ° 38.39		38.390115	0	
пеш			-121.5411	55 °	-121.540657	0		
DWR ID DWR_RD0150_03_s _ 2012_26								
Comment Code								

V6: Landscaping

#### Inspector Comment

# Photo 1 of 1: FA\_2018\_RD0150\_17\_26\_20180910\_00008.jpg



Landscaping on landward slope.

LM Start	6.45	Rating **	М	Issue No.		60		
LM End	6.45	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Vegetatio	n		38.3916	16°	38.391616°		
item	item				78°	-121.538378°		
DWR ID DWR_RD0150_03_s _ 2012_60								
	Comment Code							

V6: Landscaping

#### Inspector Comment



View of landscaping along the landward slope.

	*
N/A: Not Applicable	
	N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

**FINAL DATA** 

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

	_							
LM Start	6.52	Rating **	M	Issue No.		83		
LM End	6.52	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.3925	80°	38.392580 °		
пеш				-121.5380	59°	-121.538059°		
DWR ID DWR_RD0150_03_f _ 2014_83								
		Comn	nent Cod	de				
PR : Pruni	ngs							
Inspector Comment								



Prunings were found on the landside toe of the levee looking upstream. Fall 2014

LM Start	6.63	Rating **	М	Issue No.		962	
LM End	6.63	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCI	38.39418	32 °	38.394182°			
item	item					-121.538609°	
DWR ID	22457						
Comment Code							

#### Inspector Comment

FS\_ID:42692 DS\_ID:22457 EP\_NO: 14650

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so properly.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Diesel powered slant pump on the waterside (WS). Concrete distribution box on the landside (LS) toe. (Plans to install a slant mounted pump on the WS of the levee with a 12-inch discharge pipe through the levee authorized under Permit No. 14650, 1987 - Webber Farms). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/23/2013

#### Photo 1 of 3: UCIP\_FA\_2018\_42692\_35082.jpg



WS view: steel pipe (right) and diesel pump on levee slope.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.63	Rating **	М	Issue No.	!	962 (cont)		
LM End	6.63	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory	Category					End		
Item	DWR UC	DWR UCIP Field Study				38.394182°		
пеш	item				9°	-121.538609°		
DWR ID	22457							

#### Inspector Comment

Comment Code

FS\_ID:42692 DS\_ID:22457 EP\_NO: 14650

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Diesel powered slant pump on the waterside (WS). Concrete distribution box on the landside (LS) toe. (Plans to install a slant mounted pump on the WS of the levee with a 12-inch discharge pipe through the levee authorized under Permit No. 14650, 1987 - Webber Farms). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/23/2013

LM Start	6.63	Rating **	М	Issue No.	962 (cont)
LM End	6.63	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_42692\_35081.jpg



WS view: diesel pump on steepe levee slope.

Photo 3 of 3: UCIP\_FA\_2018\_42692\_35080.jpg



WS view: air vent on steel pipe.

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.70 Rating ** U		Issue No.		46		
LM End	6.70	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Itom	Vegetatio	n		38.3951	18°	38.395118°	
-121.538613 ° -121.538613						-121.538613°	
DWR ID DWR_RD0150_03_f _ 2018_46							
	Comment Code						

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove wild growth down to 20 ft. from levee shoulder.



View of wild growth within levee easement. Fall 2018

LM Start	6.78	Rating **	U	Issue No.		30		
LM End	6.80	Issue Type +	En	Location *	ation * LS			
Catagory	Earthen L	evee		GPS Latitude/Longitude				
Calegory	Category					End		
Item	Vegetatio	n		38.3957	91°	38.395869°		
item				-121.5373	99°	-121.537101°		
DWR ID DWR_RD0150_03_s _ 2012_30								
	Comment Code							

# V6: Landscaping

#### Inspector Comment





Landscaping on landward slope blocking view

CR : Crown

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

# + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.79	Rating **	С	Issue No.		119	
LM End	6.80	Issue Type +	Ма	Location *		WS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	2017 Stor	m Damage		38.39583	33°	38.395850 °	
пеш				-121.5371	50°	-121.537083 °	
DWR ID	DWR_RD0	150_03_f _ 201	7_119			·	

No Photos

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:On 10 February 2017, instability, cracking, and sloughing of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 20 feet long. See attached pages for photos

Site ID No:312

Site Designation:LMA-139

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is paved. Serious because erosion cuts into prism significantly, but not into crown. Worst damage is above a fallen tree, sloughing comes within 6 ft of crown here. Fall 2018 DWR Inspector: LMA repaired slope damage.

LM Start	6.80	Rating **	С	Issue No.		107	
LM End	6.80	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Erosion /	Bank Caving		38.39589	93°	38.395893°	
ROIII				-121.53704	41 °	-121.537041 °	
DWR ID DWR_RD0150_03_s _ 2018_107							
	Comment Code						
DWR ID DWR_RD0150_03_s _ 2018_107							

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

No Photos

\* Location LS : Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

# **Levee Inspection Report By Mile - Fall 2018**

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.82	Rating **	М	Issue No.		13
LM End	6.93	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Encroach	ments		38.3959	98°	38.395470°
item				-121.5366	13°	٥
DWR ID DWR_RD0150_03_s _ 2012_13						
		Comn	nent Cod	de		
FE : Fence	<del>)</del>					
Inspector Comment						



Fence was found on the landside of the levee looking downstream. Fall 2011

1110	6.85	Rating **	U	Issue No.		933	
LM Start	0.00	Rating	U	issue ivo.		933	
LM End	6.93	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calogory				Start		End	
Item	Vegetatio	n		38.3961	87°	38.396989°	
item				-121.5361	80°	-121.535151 °	
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_933						
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			
Landscapi	Landscaping needs to be maintained.						



View of the landscape on the landside shoulder of the levee looking downstream.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.86	Rating **	С	Issue No. 120		
LM End	6.87	Issue Type +	Ма	Location *	WS	
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	2017 Stor	m Damage		38.3962	33 °	38.396294°
item				-121.5360	64 °	-121.535947°
DWR ID DWR_RD0150_03_f _ 2017_120						
Comment Code						

No Photos

#### Inspector Comment

Levee Evaluation Comments

Description:On 10 February 2017, instability, cracking, and sloughing of the waterside levee slope were observed on the east (left) bank of Elk Slough. The site is approximately 40 feet long. See attached pages for photos.

Site ID No:313

Site Designation:LMA-140

Repair Type: Stability

Rating:Critical

Field Date:7/19/2017

Notes: Crown is a paved road. Serious because of extensive cracking up to hinge, high traffic volume due to nearby winery and lower 2/3 - 1/2 of slope is near vertical. Fall 2018 DWR Inspector: LMA repaired cracking and erosion damage.

LM Start	6.90	Rating **	М	Issue No. 61		61
LM End	6.90	Issue Type +	Ob	Location * W:		WS
Catagoria Earthen Levee				GPS Latitude/Longitude		
Category				Start		End
Item	Erosion /	Bank Caving		38.3966	55 °	38.396655°
пеш			-121.5354	85 °	-121.535485°	
DWR ID	DWR RD0	150 03 s 201	2 61			

#### Comment Code

E1: Note and monitor erosion site.

Inspector Comment

#### Photo 1 of 2: FA\_2018\_RD0150\_17\_61\_20180910\_00052.jpg



View of erosion on the waterside of the levee during spring 2015 inspection.

LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

#### + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

# Levee Inspection Report By Mile - Fall 2018

# **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.90	Rating **	М	Issue No.		61 (cont)
LM End	6.90	Issue Type +	Ob	Location *		WS
Earthen Levee GPS Latitude/Longitude						e/Longitude
Category		Start		End		
Erosion / Bank Caving			38.396655°		38.396655 °	
-121.535485 ° -121.53					-121.535485 °	
DWR ID DWR_RD0150_03_s _ 2012_61						
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						



Erosion was found on the waterside slope of the levee looking downstream. This updated picture was taken during fall 2012 inspection.

LM Start	6.93	Rating **	М	Issue No.		31	
LM End	6.97	Issue Type +	En	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Vegetation			38.397021 °		38.397540°		
-121.53515					51 °	-121.535183°	
DWR ID DWR_RD0150_03_s _ 2012_31							
Comment Code							
V6 : Landscaping							
Inspector Comment							



Landscaping was found on the landside shoulder of the levee looking upstream.

# Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.95	Rating **	A/W	Issue No.		121	
LM End	6.95	Issue Type +	Ma	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
2017 Storm Damage			38.397197°		38.397225°		
пеш	-121.535089° -121.535092°						
DWR ID DWR_RD0150_03_f _ 2017_121							
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-141

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because the site is so small and only looks slightly worse than the surounding levee slope. Crown is a paved road.

LM Start	6.95	Rating **	A/W	Issue No.	121 (cont)
LM End	6.95	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL\_FA\_2018\_314\_2323.jpg



CR : Crown

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	6.95	Rating **	A/W	Issue No. 121 (cont		121 (cont)	
LM End	6.95	Issue Type +	Ма	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		38.3971	97 °	38.397225 °	
пеш				-121.5350	89°	-121.535092 °	
DWR ID DWR_RD0150_03_f _ 2017_121							
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

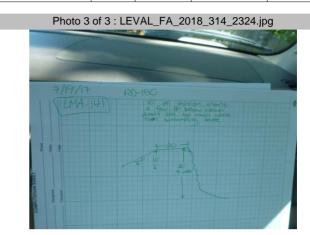
Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-141

Repair Type: Erosion Rating:Area of Concern

Field Date:7/19/2017

Notes: Area of concern because the site is so small and only looks slightly worse than the surounding levee slope. Crown is a paved road.



LM Start	7.26	Rating **	U	Issue No.		64			
LM End	7.26	Issue Type +	En	Location *		WS			
Earthen Levee			GPS L	atitud	e/Longitude				
Category				Start		End			
Item	Vegetatio	n	38.4014	81 °	38.401481°				
item				-121.536876 °		-121.536876°			
DWR ID	DWR_RD0	150_03_s _ 201	2_64						
		Comn	nent Cod	de					
V6 : Lands	scaping								
	Inspector Comment								



Landscaping on the waterside of the levee. The picture was taken from the crown looking upstream. Spring 2011

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.29	Rating **	U	Issue No.		32				
LM End	7.34	Issue Type +	En	Location *	LS					
Cotagon Earthen Levee			GPS Latitude/Longitude							
Calegory	Category					End				
Item	n		38.4017	'38	38.402296°					
пеш			-121.5371	27°	-121.537678 °					
DWR ID DWR_RD0150_03_s _ 2012_32										
		Comn	nent Cod	de						
V6 : Lands	caping									
		Inspecto	or Comm	nent						

LM Start	7.29	Rating **	U	Issue No.	32 (cont)
LM End	7.34	Issue Type +	En	Location *	LS



Vegetation on the landside of the levee looking upstream. This picture was taken during spring 2012 inspection.

Photo 2 of 2: FA\_2018\_RD0150\_17\_32\_20180910\_00014.jpg



Landscaping on landward slope blocking view

LM Start	7.40	Rating **	М	Issue No.		84	
LM End	7.40	Issue Type +	En	Location *	tion * LS		
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category		Start		End			
Item	Vegetatio	n		38.4030	47°	38.403047°	
пеш				-121.538433 °		-121.538433 °	
DWR ID DWR_RD0150_03_s _ 2012_84							
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			



Landscaping was found on the landside shoulder of the levee looking upstream.

\*\* Rating
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
N: Not Inspected/Rated
C: Corrected
N: Not Inspected/Rated
C: Corrected
N: Not Inspected/Rated
C: Corrected
N: Minimally Acceptable
C: Corrected
N: Minimally Acceptable
N: Not Inspected/Rated
C: Corrected
N: Monitor & Maintain
En: Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

					ı			
LM Start	7.44	Rating **	U	Issue No.		934		
LM End	7.44	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
				Start		End		
Item	Vegetatio	n		38.4035	66 °	38.403566°		
пеш				-121.5388	886°	-121.538886 °		
DWR ID DWR_RD0150_03_s _ 2012_934								
		Comn	nent Cod	de				
V6 : Lands	scaping							
		Inspecto	or Comm	nent				



Landscaping was blocking the visibility on the landside of the levee looking downstream.

LM Start	7.47	Rating **	М	Issue No.	935					
LM End	7.47	Issue Type +	En	Location *	LS					
Category Earthen Levee			GPS La	GPS Latitude/Longitude						
Odlogory				Start		End				
Item	Encroach	ments		38.4037	'95	38.403795°				
item				-121.5392	05°	-121.539205 °				
DWR ID DWR_RD0150_03_s _ 2012_935										
		Comn	nent Cod	le						
PR : Pruni	ngs									
			_							
		Inspecto	or Comm	nent						

LM Start	7.47	Rating **	М	Issue No.	935 (cont)
LM End	7.47	Issue Type +	En	Location *	LS

#### Photo 1 of 2: FA\_2018\_RD0150\_17\_935\_20180910\_00137.jpg



Prunings were found on the landside of the levee looking upstream.

Photo 2 of 2: FA\_2018\_RD0150\_17\_935\_20180910\_00138.jpg



Prunings were found on the landside of the levee looking upstream. This picture was taken during fall 2011 inspection.

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable M : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.70	Rating **	М	Issue No.		52	
LM End	7.70	Issue Type +	Ma	Location *	tion * WS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Encroach	ments		38.4055	36°	38.405536	0
item				-121.5427	52°	-121.542752	0
DWR ID	DWR_RD0150_03_f _ 2015_52						
Comment Code							

TR : Tree or limb

#### Inspector Comment

Tree trunks and stumps need to be removed from levee slope.





View of the tree trunk on the waterside toe of the levee. Fall 2018

#### Photo 2 of 2: FA\_2018\_RD0150\_17\_52\_20180910\_00041.jpg



View of the tree trunk on the waterside toe of the levee. Fall 2015

Photo 1 of 1: FA\_2018\_RD0150\_17\_112\_20180910\_00107.jpg

LM Start	7.73	Rating **	М	Issue No.		112	
LM End	7.73	7.73 Issue Type + En Location * WS					
Category	Catagoria Earthen Levee					e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.4059	49°	38.405949°	
item				-121.5429	96°	-121.542996°	
DWR ID DWR_RD0150_03_s _ 2017_112							
		Comn	nent Cod	de			
FW : Firew	ood .						
	Inspector Comment						



View of firewood on the waterside shoulder of the levee looking upstream. Spring 2017

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.74	Rating **	ing ** U Issue No.		63	
LM End	7.74	Issue Type +	En	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Encroach	Encroachments			60°	38.406060 °
пеш				-121.5430	27°	-121.543027°
DWR ID	DWR_RD0150_03_f _ 2018_63					·
Comment Code						

#### Cui

FW: Firewood

#### Inspector Comment

Firewood sits on levee shoulder and slope.



View of firewood on levee shoulder. Fall 2018

LM Start	7.74	Rating **	М	Issue No.		396
LM End	7.74	Issue Type +	Ma	Location *		WS
Category	Earthen L		GPS Latitude/Longitude			
Calegory						End
Item	Slope Sta	Slope Stability			98°	38.406098°
пеш					28°	-121.543028°
DWR ID	DWR_RD0150_03_s _ 2015_396					

#### Comment Code

S1: Repair slope instability.

#### Inspector Comment

Slope instability caused by a fallen tree.

# Photo 1 of 1 : FA\_2018\_RD0150\_17\_396\_20180910\_00134.jpg



Slope instability was found on the waterside toe of the levee looking upstream. Spring 2015

LM Start	7.75	<b>7.75</b> Rating ** M		Issue No.		129	
LM End	7.75	Issue Type +	En	Location *	WS		
Category	Category Earthen Levee				GPS Latitude/Longitude		
Category			Start		End		
Item	Encroach	Encroachments			98°	38.406298 °	
item				-121.54293	39°	-121.542939 °	
DWR ID	DWR_RD0150_03_f _ 2017_129						
	Comment Code						

TR: Tree or limb

### Inspector Comment

Remove fallen tree from the waterside shoulder of the levee, and fill any large void.



View of a tree stump on the waterside shoulder of the levee. Fall 2017

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
C: Corrected
C: Corrected
U: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

### **Levee Inspection Report By Mile - Fall 2018**

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	7.78	Rating **	М	Issue No.		117		
LM End	7.78	Issue Type +	En	Location *	Location * WS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.4066	45°	38.406645 °		
пеш				-121.5428	35°	-121.542835 °		
DWR ID	DWR_RD0	150_03_s _ 201	7_117					
		Comn	nent Coc	de				
FW : Firew	vood							
		Inspector Comment						
Firewood on waterside slope.								

No Photos

LM Start	7.79	Rating **	М	Issue No.		75	
LM End	7.79	79 Issue Type + Ma		Location *		WS	
Catagory	Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End		
Item	Encroachments			38.4068	05°	38.406805°	
item				-121.5427	03°	-121.542703°	
DWR ID	R ID DWR_RD0150_03_f _ 2018_75						

Comment Code

TR : Tree or limb

#### Inspector Comment

Large tree log needs to be removed from levee slope.



View of tree log on levee slope. Fall 2018

LM Start	8.02	8.02 Rating ** M				92	
LM End	8.02	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Slope Stability			38.4091	30°	38.409130°	
пеш				-121.5399	71 °	-121.539971 °	
DWR ID	DWR_RD0150_03_s _ 2014_92						
	Comment Code						

S1: Repair slope instability.

Inspector Comment



View of slope instability on the waterside of the levee looking upstream during spring 2015 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.02	Rating **	М	Issue No.	92 (cont)			
LM End	8.02	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Slope Sta	bility		38.4091	30°	38.409130°		
item				-121.539971 °		-121.539971 °		
DWR ID	DWR_RD0	150_03_s _ 201	4_92			·		
		Comn	nent Cod	de				
S1 : Repa	ir slope ins	tability.						
Inspector Comment								



Slope instability was found on the waterside of the levee looking downstream.

LM Start	8.05	Rating **	A/W	Issue No.	122		
LM End	8.05	Issue Type +	Ma	Location *	WS		
Category	ental	GPS La	tituc	le/Longitude			
Category	Start						
Item	2017 Stor	m Damage		38.4092	28°	38.409233°	
пеш	-121.539389 ° -121.539356						
DWR ID DWR_RD0150_03_f _ 2017_122							
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-142 Repair Type: Erosion Rating:Serious Field Date:7/17/2017

Notes: The erosion extends along most of the slope. Nearby WS banks are all very steep (1:1 or less). Serious because the erosion extend along the entire slope, but not into the crown. Fall 2018 DWR Inspector: Erosion not visible during this inspection but is marked.



View of waterside slope. Fall 2018

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.05	Rating **	A/W	Issue No.		122 (cont)	
LM End	8.05	Issue Type +	Ma	Location *		WS	
Category	Supplemental					le/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		38.4092	28°	38.409233 °	
item	-121.539389 ° -121.539356						
DWR ID DWR_RD0150_03_f _ 2017_122							
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description: Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:315

Site Designation:LMA-142 Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: The erosion extends along most of the slope. Nearby WS banks are all very steep (1:1 or less). Serious because the erosion extend along the entire slope, but not into the crown. Fall 2018 DWR Inspector: Erosion not visible during this inspection but is marked.

LM Start	8.05	Rating **	A/W	Issue No.	122 (cont)
LM End	8.05	Issue Type +	Ma	Location *	WS



Photo 3 of 4: LEVAL\_FA\_2018\_315\_2186.jpg



CR : Crown

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.05	Rating **	A/W	Issue No.	122 (cont)			
LM End	8.05	Issue Type +	Ма	Location *	WS			
Category	Suppleme	ental	GPS La	tituc	le/Longitude			
Category				End				
Item	2017 Stor	m Damage		38.40922	28°	38.409233°		
пеш	-121.539389 ° -121.539356							
DWR ID DWR_RD0150_03_f _ 2017_122								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long and progresses up to the levee crown. See attached pages for photos. Site ID No:

Site Designation:LMA-142

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: The erosion extends along most of the slope. Nearby WS banks are all very steep (1:1 or less). Serious because the erosion extend along the entire slope, but not into the crown. Fall 2018 DWR Inspector: Erosion not visible during this inspection but is marked.



LM Start	8.05	Rating **	М	Issue No.		82	
LM End	8.05	Issue Type +	En	Location *		LS	
Category Earthen Levee GPS Latitude/Longitude							
Start End							
Item	Encroach	ments		38.4092	24°	38.409224°	
-121.539350 ° -121.539350 °							
DWR ID DWR_RD0150_03_f _ 2013_82							
Comment Code							

### PR : Prunings

#### Inspector Comment

#### Photo 1 of 1: FA\_2018\_RD0150\_17\_82\_20180910\_00077.jpg



Prunings were found on the landside toe of the levee looking upstream. Fall 2014

CR : Crown

LS : Land Side N/A : Not Applicable WS : Water Side

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.20	Rating **	U	Issue No.		963
LM End	8.20	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		38.4086	19°	38.408619°
пеш				-121.5367	68°	-121.536768 °
DWR ID 22466						

### Inspector Comment

Comment Code

FS\_ID:53335 DS\_ID:22466 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 06/05/2018: Same as last inspection so the crossing remains Urgent due to caved in levee below pipe at gate valve; needs proper abandonment (DWR UCIP - D. Sanoski).07/08/2016: Needs proper abandonment. Levee caved in below pipe at gate valve on WS. Discussed abandonment with Warren Bogle of Colby Ranch. (K. Fazel - UCIP)08/23/2013: Needs proper abandonment (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 13.8 feet below the crown. Gate valve on the waterside (WS) slope. Pilings in the stream, but no pump was found. Service pole with guy wire on the landside (LS) slope. Standpipe on the LS slope. (A. Colby). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 8.34)].

FS Date: 6/5/2018 3:30:00 PM

LM Start	8.20	Rating **	U	Issue No.	963 (cont)
LM End	8.20	Issue Type +	En	Location *	



WS view: pipe visible on levee slope and in the stream.

Photo 2 of 3: UCIP\_FA\_2018\_53335\_33626.jpg



WS view: abandoned gate valve found on levee slope.

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.20	Rating **	U	Issue No.		963 (cont)
LM End	8.20	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory		Start		End		
Item	DWR UCI	P Field Study		38.4086	19°	38.408619°
пеш				-121.5367	68°	-121.536768°
DWR ID	22466					·

### Inspector Comment

Comment Code

FS\_ID:53335 DS\_ID:22466 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 06/05/2018: Same as last inspection so the crossing remains Urgent due to caved in levee below pipe at gate valve; needs proper abandonment (DWR UCIP - D. Sanoski).07/08/2016: Needs proper abandonment. Levee caved in below pipe at gate valve on WS. Discussed abandonment with Warren Bogle of Colby Ranch. (K. Fazel - UCIP)08/23/2013: Needs proper abandonment (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe through the levee, invert elevation 13.8 feet below the crown. Gate valve on the waterside (WS) slope. Pilings in the stream, but no pump was found. Service pole with guy wire on the landside (LS) slope. Standpipe on the LS slope. (A. Colby). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 8.34)].

Photo 3 of 3 : UCIP\_FA\_2018\_53335\_33625.jpg

LS view: no pipe and structure found on landside.

LM Start	8.26	Rating **	М	Issue No.	65			
LM End	8.26	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Erosion /	Bank Caving		38.4082	13 °	38.408213 °		
item				-121.5359	11 °	-121.535911 °		
DWR ID DWR_RD0150_03_f _ 2015_65								
Comment Code								

E1: Note and monitor erosion site.

Inspector Comment

#### Photo 1 of 1: FA\_2018\_RD0150\_17\_65\_20180910\_00056.jpg



View of erosion on the waterside of the levee. Fall 2015

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
N: Not Inspected/Rated
C: Corrected
C: Corrected
D: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Hssue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.31	Rating **	М	Issue No.		87		
LM End	8.31	Issue Type +	En	Location *	CR			
Category	evee	GPS Latitude/Longitude						
Category				Start		End		
Encroachments				38.4079	83°	38.407983 °		
item	item				23°	-121.535023 °		
DWR ID	DWR_RD0	150_03_f _ 201	8_87					
		Comn	nent Cod	de				
PR : Prunings								
Inspector Comment								

Prunings obstruct access on crown and need to be cleared.



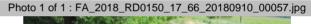
View of prunings left on crown. Fall 2018

LM Start	8.31	Rating **	М	Issue No.		66			
LM End	8.31	Issue Type +	Ma	Location *		WS			
Catagory Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
ltom	Erosion /	Bank Caving		38.4079	60°	38.407960°			
Item				-121.5348	98°	-121.534898°			
DWR ID DWR_RD0150_03_s _ 2012_66									

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment





View of erosion on the waterside of the levee. Spring 2015

LM Start	8.33	Rating **	М	Issue No.	67			
LM End	8.33	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End				
Item	Erosion /	Bank Caving		38.40795	8°	38.407958°		
item				-121.53458	3°	-121.534583 °		
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_67							
Comment Code								

E1: Note and monitor erosion site.

Inspector Comment



View of the erosion on the waterside shoulder looking upstream during spring 2014 inspection.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.33	Rating **	М	Issue No.		67 (cont)	
LM End	8.33	Issue Type +	Ma	Location *	WS		
Category	Category Earthen Levee					e/Longitude	
Category		Start		End			
Item	Erosion / Bank Caving			38.4079	58°	38.407958 °	
пеш				-121.53458	83 °	-121.534583°	
DWR ID	DWR_RD0	150_03_s _ 201	2_67				
		Comn	nent Cod	de			
E1 : Note and monitor erosion site.							

Inspector Comment





Erosion was found on the waterside shoulder of the levee looking upstream. This picture was taken during fall 2012 inspection.

LM Start	8.35	Rating **	A/W	Issue No.	123			
LM End	8.35	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Category	alegory					End		
Item	2017 Stor	m Damage		38.4079	33°	38.407992°		
item				-121.5343	22°	-121.534289°		
DWR ID DWR_RD0150_03_f _ 2017_123								
	Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:316

Site Designation:LMA-143 Repair Type: Erosion

Rating:Serious
Field Date:7/17/2017

Notes: 3 large trees in/ajacent to site including a fallen tree in the middle of the erosion. Erosion on almost the whole slope, but doesn?t cut into the crown. Serious because erosion cuts into levee significantly here.



LS : Land Side N/A : Not Applicable WS : Water Side

#### \*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.35	Rating **	A/W	Issue No.		123 (cont)
LM End	8.35	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory		Start End				
Item	2017 Stor	m Damage		38.4079	83°	38.407992
пеш				-121.5343	22 °	-121.534289
DWR ID	DWR_RD0	150_03_f _ 201	7_123			
		Comn	nent Cod	de		

#### Inspector Comment

Levee Evaluation Comments

Description:Erosion was observed on the waterside levee slope on the east (left) bank of Elk Slough. The site is approximately 10 feet long. See attached pages for photos.

Site ID No:316

Site Designation:LMA-143

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: 3 large trees in/ajacent to site including a fallen tree in the middle of the erosion. Erosion on almost the whole slope, but doesn?t cut into the crown. Serious because erosion cuts into levee significantly here.

LM Start	8.35	Rating **	A/W	Issue No.	123 (cont)
LM End	8.35	Issue Type +	Ма	Location *	





### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.37	Rating **	М	Issue No.		88
LM End	8.37	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments				55°	38.408155 °
пеш				-121.5339	82°	-121.533982°
DWR ID DWR_RD0150_03_s _ 2012_88						
		Comn	nent Cod	de		
PO : Pole						
		Inspecto	or Comm	nent		

No Photos

Rating \*\* Issue No. С 8.37 89 LM Start Location \* 8.37 Issue Type + Ма WS LM End Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 38.408153° 38.408153° Item -121.533980 ° -121.533980° DWR\_RD0150\_03\_s \_ 2012\_89 DWR ID Comment Code

No Photos

Inspector Comment

A1: Exterminate rodents and backfill and compact or grout burrows.

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.37	Rating **	М	Issue No.		964
LM End	8.37	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.40818	8°	38.408188 °
пеш				-121.53393	5 °	-121.533935 °
DWR ID	22467					

#### Inspector Comment

Comment Code

FS\_ID:41648 DS\_ID:22467 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - walkway in poor functional condition- an abandoned 8-inch steel pipe next to 12" pipe. This 8" pipe might have merged with 12" pipe under the levee .- Pipe and pump inside

concrete masonry wall.

FIELD STRUCT DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 13 feet below the crown. Pump and gate valve in a pump house on the waterside (WS) slope. Concrete distribution box at the landside (LS) toe. Service pole on the WS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 8.51)].

FS Date: 8/23/2013

LM Start	8.37	Rating **	М	Issue No.	964 (cont)
LM End	8.37	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_FA\_2018\_41648\_33642.jpg



WS view: walkway and inlet pipe on levee slope.

#### Photo 2 of 3: UCIP\_FA\_2018\_41648\_33641.jpg



WS view: pump, gate valve, and airvent on pipe inside concrete masonry box.

### Levee Inspection Report By Mile - Fall 2018

### Reclamation District No. 0150 Merrit Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.37	Rating **	М	Issue No.		964 (cont)
LM End	8.37	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	ituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.40818	8 °	38.408188 °
пеш				-121.53393	5 °	-121.533935 °
DWR ID	22467					

#### Inspector Comment

Comment Code

FS\_ID:41648 DS\_ID:22467 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - walkway in poor functional condition- an abandoned 8-inch steel pipe next to 12" pipe. This 8" pipe might have merged with 12" pipe under the levee .- Pipe and pump inside

concrete masonry wall.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, invert elevation 13 feet below the crown. Pump and gate valve in a pump house on the waterside (WS) slope. Concrete distribution box at the landside (LS) toe. Service pole on the WS shoulder. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 112, March 1957, (HLM 8.51)].

FS Date: 8/23/2013



WS view: 8-inch steel pipe (right) next to 12" pipe (left). This 8" pipe might have merged with 12" pipe under the levee .

LM Start	8.38	Rating **	М	Issue No.		69
LM End	8.47	Issue Type +	En	Location *	LS	
Category	Earthen L	then Levee GPS Latitude/Longitu			e/Longitude	
Category				Start		End
Item	Encroachi	croachments		38.4082	38°	38.409291 °
item				-121.5338	66 °	-121.532702°
DWR ID	DWR_RD0	150_03_s _ 201	12_69			
		Comn	nent Cod	de		
DT : Ditch						

Inspector Comment Irrigation ditch runs along landside toe.

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency

Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

Category         Earthen Levee         GPS Latitude/Longitude/Lo		0110	Type + Ma			LS	
Start   E	ategory	Earthen Levee					
Start   E   38.409220 ° 38.	ategory			GPS La	titude	e/Longitude	
ttem				Start		End	
-121.532801 ° -121.   DWR ID   DWR_RD0150_03_s _ 2012_90   Comment Code	ltom	Trim / Thin Trees	38.40922	20°	38.409220 °		
Comment Code T5 : Tree stumps.	item			-121.53280	-121.532801 °		
T5 : Tree stumps.	DWR ID DWR_RD0150_03_s _ 2012_90						
·			Comment Cod	de			
Inspector Comment	: Tree s	tumps.					
Inspector Comment							
		In	spector Comn	nent			



A tree stump was found on the landside of the levee looking upstream.

LM Start	8.50	Rating **	N	Issue No.		55
LM End	8.50	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Trim / Thin Trees			38.409559°		38.409559°
пеш				-121.5323	56°	-121.532356°
DWR ID	DWR_RD0150_03_s _ 2012_55					
Comment Code						

T5 : Tree stumps.

Inspector Comment

## Photo 1 of 1 : FA\_2018\_RD0150\_17\_55\_20180910\_00046.jpg



A tree stump was found on the waterside of the levee looking upstream. Fall 2011

LM Start	8.72	Rating **	М	Issue No.		7	
LM End	8.72	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Encroachments				93°	38.411593°	
Rem				-121.529143 °		-121.529143°	
DWR ID	DWR ID DWR_RD0150_03_s _ 2012_7						
		Comn	nent Cod	le			
DE : Debri	S						
Inspector Comment							



Broken concrete pipe was left on the waterside slope of the levee. The picture was taken from the crown looking upstream. Spring 2011

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	8.95	Rating **	М	Issue No.		128	
LM End	8.95	Issue Type +	Ма	Location *		CR	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltem Encroachments			38.4148	31°	38.414831 °		
			-121.528982 °		-121.528982°		
DWR ID	DWR ID DWR_RD0150_03_s _ 2018_128						
		Comn	nent Cod	de			
TR : Tree	or limb						
			_				
Inspector Comment							
Remainder of downed tree remains on levee crown and shoulder.							



Downed tree blocking crown looking north. Spring 2018

LM Start	9.20	Rating **	U	Issue No.		97	
LM End	9.20	Issue Type +	Ma	Location *		WS	
Category	Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetation			38.4133	88°	38.413388°	
пеш				-121.5261	30°	-121.526130°	
DWR ID	DWR_RD0150_03_f _ 2018_97						

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Grapevines block visibility and need to be cleared.



View of dense vegetation that blocks visibility of levee slope. Fall 2018

LM Start	9.21	Rating **	N	Issue No.		59	
LM End	9.21	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Trim / Thin Trees			38.413268 °		38.413268 °	
item			-121.525929 °		-121.525929°		
DWR ID	D DWR_RD0150_03_s _ 2012_59						
	Comment Code						
T5 : Tree s	stumps.						
Inspector Comment							



A tree stump was found on the waterside of the levee looking upstream. Fall 2011

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	9.31	Rating **	U	Issue No.		73	
LM End	9.35	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item Trim / Thin Trees			38.4130	95°	38.413169°		
				-121.524402 °		-121.523707°	
DWR ID	DWR_RD0150_03_s _ 2012_73						
		Comn	nent Cod	de			
T3 : Trim a flood fight.		es to allow vis	sibility of	the ground	anc	d room to	
Inspector Comment							

Photo 1 of 3 : FA_20	18_RD0150_17_73_20181115_00207.jpg
	The second second
	To be a second of the second o

View of dense vegetation within levee easement. Fall 2018

LM Start	9.31	Rating **	U	Issue No.	73 (cont)
I M End	9.35	Issue Type +	Ma	Location *	WS



View of fallen tree on levee slope. Fall 2018

LM Start	9.31	Rating **	U	Issue No.	73 (cont)
LM End	9.35	Issue Type +	Ma	Location *	WS



Thin/trim trees to allow for visibility of top 20' of waterward slope.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain Enforcement

\*\* Rating

A : Acceptable M : Mointenance Deficiency Ob : Design & System Obsolescence

En : Enforcement

### Levee Inspection Report By Mile - Fall 2018

### **Reclamation District No. 0150 Merrit Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Elk Slough	Left	9.41	11/09/2018 11/09/2018	Luz Dial

LM Start	9.39	Rating **	М	Issue No.		950	
LM End	9.39	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			38.413560 °		38.413560 °	
item			-121.522936°		-121.522936 °		
DWR ID DWR_RD0150_03_s _ 2012_950							
Comment Code							
EQ : Equipment							
Inspector Comment							

Photo 1 of 1 : FA\_2018\_RD0150\_17\_950\_20180910\_00140.jpg

Equipment was found on the landside of the levee looking downstream.

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement